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Nearly 100 junior colleges were studied to find the interrelationships among college environments and faculty, student, administrator, and community characteristics and to examine the variables that generate and maintain them. Data were gathered on three factors: (1) external determinants (variables like community characteristics, and student and faculty preferences for environmental dimension, each with subsets); (2) internal determinants (Junior College Environmental Scales [JCES], namely, Conventional Conformity, Internationalization, Maturation, and Humanism); (3) criterion measures (outputs of the college and student attitudes to it). For evaluation of college outputs, several indices were used; for student attitudes, two sets of items were used. Of the seven canonical analysis made to estimate the relationships among the three factors, five showed statistically significant correlations. One showed two dimensions between external determinants and the four JCES; the second found three common dimensions between the external determinants and measures of student satisfaction and achievement; the third described the relationship between external determinants and student participation in activities; the fourth associated the JCES with 19 items of student satisfaction and achievement; the fifth correlated the JCES with participation in student activities. Regression analyses are summarized for each of 21 independent variables and 44 dependent variables. Discussion, conclusions, implications, and tables showing all correlations are given. (HH)

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FINAL REPORT
Project No. 5-0770
Contract No. OE-6-10-262

# Functional Relationships of Junior College Environments and Selected Characteristics of Faculties, Students, the Administration, and the Community

June, 1967

U.S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE

Office of Education
Bureau of Research

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# Functional Relationships of Junior College Environments and Selected Characteristics of Faculties, Students, the Administration, and the Community.

Project No. 5-0770
Contract No. OE-6-10-262

Vernon L. Hendrix

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

University of Minnesota

Minneapolis, Minnesota

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# Chapter I

## Introduction

### Background and Problem

The public junior college has come to claim that it is a community college. This is significant in that the term community college has come to mean more than that which the term junior college implies. In addition to offering two years of collegiate work, the public community junior college is, in theory at least, an institution whose purposes, as reflected in its curriculum and services, are determined by the needs of the community it serves. These needs are usually broadly defined to include both technical and vocational programs which may be completed at the college and programs which are appropriate for transfer to a four-year institution, in addition to rather far ranging community service functions. Implications regarding the extent to which the junior college has actually become a community college may be drawn from this study.

To become a community college involves the characteristics of the community which will define the nature and extent of community needs which might feasibly be met by the community college. These community needs largely determine the nature of desired "output" of the college, the success in attainment of which may be measured primarily by the extent of appropriate knowledge and skills gained by its students. To be successful, the comprehensive community college attempts to formulate purposes based upon community characteristics. The college will then attempt to produce output that is congruent with the desirable output determined by community needs.

Community characteristics are a part of the complex formal educational process. Research in education has often been weakened because it attempted to correlate certain variables in an educational setting without consideration of the complex environment in which it exists. If the junior college is, indeed, a community college and as a result affected very much by the environment of the community in which it is located, research concerning such college must include consideration of community characteristics. The junior college must define its educational purposes and goals in terms of the initial characteristics, behaviors, and abilities of students entering from the community and the desired, or terminal, characteristics, behaviors and abilities of these students at the end of their educational experience. These desired termal characteristics are largely defined by the characteristics of the community. The community is itself individualized in that there may be considerable variance from one community to another further complicating the definition and evaluation of the educational goals and purposes of the typical multi-purpose public community junior college. The complexity of the close relationship between the college and the community tends to make the two-year college an ideal area to examine the variables that are a part of this study.

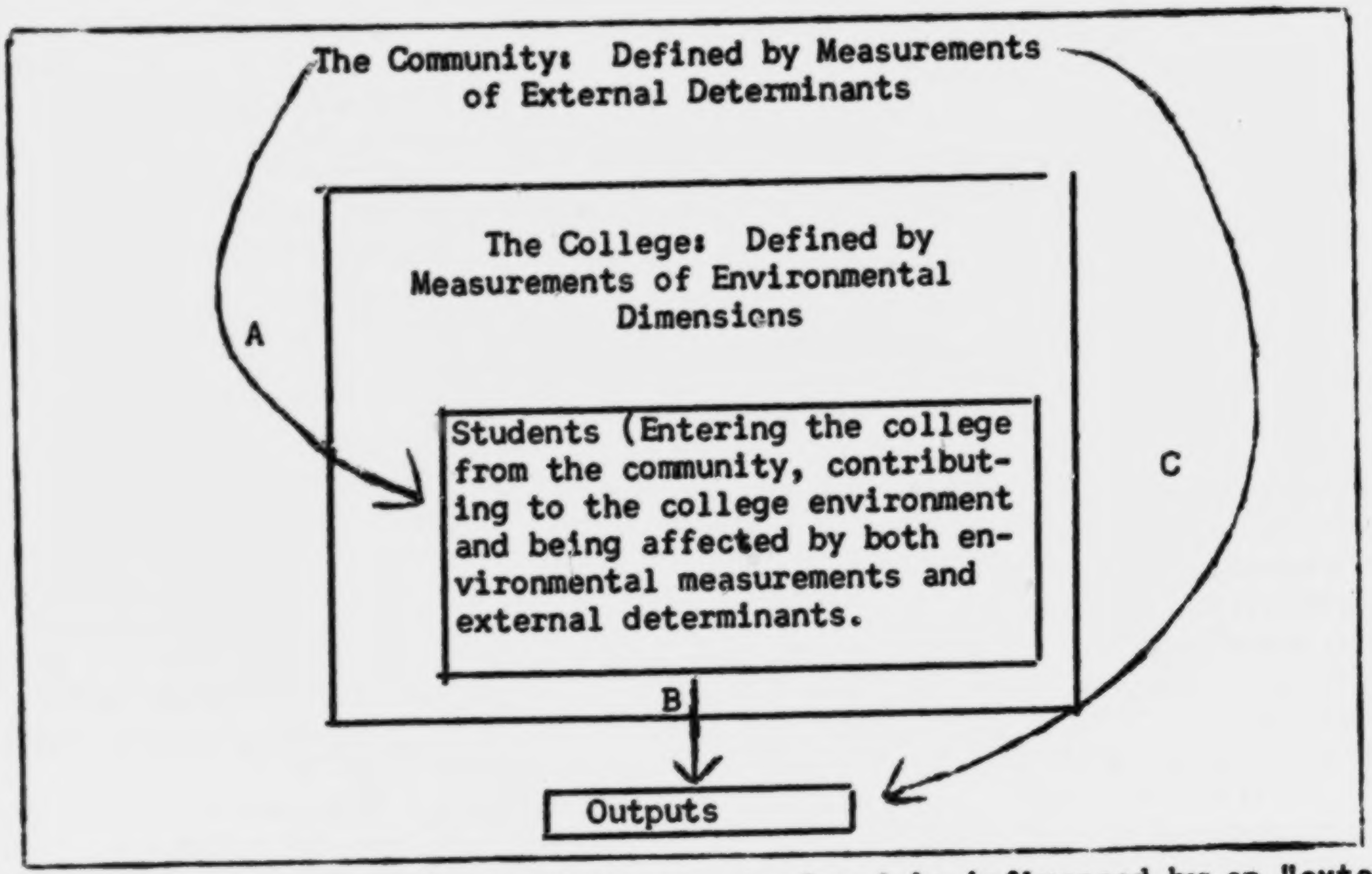
External determinants are broadly defined as factors physically outside of the college or coming into the college but which might hypothetically be associated with the college, its objectives, and the ways in which it operates to achieve the objectives. These are classified later (see Chapter II and Appendices B, C, D, F, G, and I) as community variables (primarily U.S. Census data characterizing economic, demographic, sociological and cultural, dimensions of the community surrounding the college) and "input" variables (attitudes of faculty and students toward environmental elements).

Internal determinants are broadly defined as factors physically within the college and which hypothetically might be associated with the objectives of the college and the ways in which the college operates to achieve the objectives. For purposes of this study it is assumed that these determinants are contained within the environmental measurements (see Chapter III and Appendices E and I) at least to the extent that they affect the student's perception of his college environment. Criteria are described more specifically in Chapter IV and Appendix I but are broadly defined as those things which the college achieves as the result of applying an "environment" to students.

A realistic means of examining complex interacting factors in a manner that permits effective operational analysis is through environmental measurement. Such an instrument permits an individual to express his perspective of what exists or does not exist in a set of characteristics of the community, the college, or some other environment. Any other method (e.g., interviews, case studies, etc.) of obtaining perspectives of this type is hampered by the complexity of the environment. Considering the large number of factors operating within and around any given junior college, and the complicated interactions of these factors, an initial approach is to seek a method for reducing this complexity for analytical purposes. If all of these factors and their interactions, which together comprise the "environment" of the college as it affects students, can be assessed by fewer dimensions, with sufficient reliability and validity, these dimensions would then appear to be more useful. If one is ultimately interested in discovering what operationally defines educational goals and purposes and what promotes or hinders the achievement of these goals and purposes, it is more reasonable to search for answers in terms of an "environment", rather than seeking relationships between isolated factors. People must operate and interact within environmental systems, the specific components of these systems being both known and unknown to them. One of the purposes of this study is to devise and test a method with which to describe a complex junior college environment with fewer but more useful dimensions. Both C. Robert Pace and George G. Stern, more particularly Pace, have developed what appears to be a reliable and useful method (see Related Research). Pilot studies conducted by Pace, Hendrix and B. Lamar Johnson at the University of California, Los Angeles, indicated the potential usefulness of this technique in public community junior colleges (Hendrix, 1965a, 1965b; Pace, 1967a; Tucker, Sylvia, 1964).

The written purposes of a college may differ somewhat from the actual (operational) goals as perceived by faculty and students within the institution. The perceived environment, or "effective" environment, gives an operational definition of goals and purposes. In colleges where considerable differences might exist between the two sets of goals, the institution is attempting to achieve objectives other than those it has said it is attempting as evidenced by its described objectives. Where there is considerable discrepancy between the two sets of objectives, the college staff might not be cognizant of its actual objectives, or else it recognized the differences which are probably expressed through various problems such as faculty and student dissatisfaction, etc. In some instances, a reappraisal of institutional objectives would be in order (See Pace, 1963 for further treatment of "effectiveness").

The relationships discussed and implied in previous paragraphs are schematically represented by the following:


The Community: Defined by Measurements of External Determinants
The College: Defined by Measurements of Environmental Dimensions
A
Students (Entering the college from the community, contributing to the college environment and being affected by both environmental measurements and external determinants.
C
B
Outputs

The college environment is a part of and is influenced by an "external" environment - the community. The student enters the college environment from the larger external environment, thereby contributing to the college environment and being affected by both environments. It is the combined action of these environments on students which produce outputs from the college back into the community. Relationships A, B, and C in the above illustration are separately measured and their relationships estimated. The community determines the output indirectly through its influence on the purposes or goals of the college and directly by the nature of the students entering college. The college environment, as measured by an environmental press instrument, is an internal view of the college in operation. Relationships between the college environment and the output measures indicate the extent to which existent press within the college is related to particular kinds of output. College environment is a specialized substructure of the total community environment.

Utilization of this conceptual framwork will hopefully permit analysis of the characteristics of a community and thus arrive at the definition of a community junior college, in terms of environmental dimensions which define, operationally, goals and purposes most suitable for a college in a given community. Defining the college suitable for a given community should then hopefully assist with the selection of the components (staff, etc.) of the college to maximize the probability of achieving a junior college characterized by the desired environment. This research reports the beginning of a projected series of studies designed to "answer" these types of problems.

## Research Objectives

There are three major objectives of this study. The first objective is to discover the relationships between community characteristics (external determinants) and certain criteria (outputs). It might be expected that community pressures upon the college would cause the college to establish purposes which reflect community characteristics although some characteristics will be much more powerful in their effect than others. These established purposes would presumably be reflected in that which the institution achieves. If this hypothesis is correct, there should be measureable functional relationships between external determinants and criteria.

A second major objective is to discover relationships that exist between external determinants and the environmental press of the college as perceived by students. Because (1) the external determinants may influence the effective goals of the college and, (2) environmental press is a view of the operational purposes of the college, some important relationships may be found. Environmental press thus is seen as, in part, a product of the external determinants. It might be expected that communities with certain characteristics would produce colleges that exert a particular kind of press upon its students. This relationship between external determinants and environmental press should provide considerable insight into the real nature of the community college.

The third major objective attempts to discover functional relationships between the environmental press of the college and the criteria. "Output" of the college should rather accurately reflect the actual or operational goals of the college as determined through measures of environmental press. The operational goals (from college environmental press) is what the college is actually trying to do while the output is what the college is able to do. Correlation would normally be high unless the college encounters obstructions to its intentions. If such obstructions exist, they would be at least partly brought to light by the relationships found as a result of objectives one and two.

## Related Literature

Studies have been made which recognize that certain variables of importance to educational administration and policy-making can be regarded within the three-fold framework (external determinants, environmental dimension, and outputs) as hypothesized in this study. They also indicate the need for more comprehensive research to determine more specifically the relationships among these variables. These background studies will be reviewed here whereas studies more specifically related to this research will be treated in later chapters.

Nearly thirty years ago Henry A. Murray (1938) developed the related psychological concepts of need and press in explaining the dimensions of personality. The concept of need represents behavior determinants operative within the individual. Needs, when measured, may be found to be highly correlated with certain kinds of individual behavior. To explain the nature of an individual's needs is to explain much of his behavior.

As a seperate but closely related concept, press is the environmental stimulus upon an indivudual for certain kinds of behavior. Press acts as a "threat of harm" or "promise of benefit" in creating needs from the environment. When an individual "looks" at press, he sees those things in his environment that seem to be a "threat" or "promise" and thus a relationship to his behavior is established. Press is an indirect means of viewing how an environment actually operates which may be in contrast to the theoretical structure of a particular environment such as a community junior college.

Murray was concerned with need-press theory as it related to the individual. Further studies of personality by Edwards and others based upon Murray's need concept were also developed along the lines of individual analysis. Further research by George Stern and subsequently C. Robert Pace saw its application to groups rather than individuals (Pace 1960, 1962, 1963, 1964). When used in this manner, press is a reliable measure of environment as seen by a composite of individuals rather than a single individual. A greater number of relevant dimensions and their relative intensity become apparent with the measurement of press in a homogeneous group.

Not until Stern developed the Activities Index was the measurement of press in groups feasible. Following this, Stern and Pace developed the College Characteristics Index (CCI) which contained items that would measure the college student's environmental (press) counterparts to the needs expressed in the Activities Index. Because Stern's interests are in the area of personality assessment he used the CCI for individual response analysis. Pace, reflecting his interest in evaluation and measurement in higher education, used CCI data as the basis for further research in derivation of institutional norms.

The CCI was the product of an attempt by Pace and Stern to devise an instrument which was capable of differentiating the environment found on various college campuses. The items included in the instrument were inteneed as environmental press counterparts to existing personality needs. Using the thirty personality needs found in Stern's Activities Index, thirty corresponding press scales were developed for the CCI. These scales were selected as probable environmental factors seen as frustrating or satisfying a particular personality need. The CCI has gone through several forms and is now primarily the concern of Stern in his psychological analysis of individual response.

Pace has attempted to look at the college rather than the individual students. As a result he has been concerned with developing dimensions that discriminate among college campuses. Pace has taken the approach that in groups of individuals the existent needs of the group may have little empirical relationship as counterpart to the press perceived by the group (for related problems see David, et al, 1961). As a result there is little need to develop press scales as counterparts of needs. The individual responses themselves are meaningless except for determining group means and deviations.

Utilizing this approach Pace has developed the College and University Environment Scale (CUES). CUES is an adaptation of the CCI designed to measure institutional environments. The CCI has 300 items so as to have a sufficient number of counterparts to the Activities Index. CUES contains 150 items selected from CCI. A carefully selected group of 50 colleges was used for establishing norms. This group, however, included only four year colleges and thus the dimensions and norms would not be as meaningful for the two-year college. The item selection (as will be discussed more fully later) did not attempt to include junior college enviornmental phenomena which might differ from that found on the four year college campus. Considerable effort was expended, however, to be certain that the norm group represented a national sample of colleges both large and small, public and private, wealthy and modest, located in large cities and in small towns, and widely scattered geographically.

CUES was originally published in 1963 and by 1966 Pace (1966a) was able to conclude that there is considerable stability in CUES scores over a period of one or two years with comparable student samples. Considerable stability exists even over a period of five to seven years apart. Changes that do exist in a later testing indicates that CUES reflects changing national interests of students.

In comparing students, Pace discovered that seniors, juniors, and sophomores view the environment in very much the same way leading to the conclusion that "qualified reporters may be defined broadly as students who have had two or more years of experience in the college environment they are describing" (Pace, 1966b). Pace argues against including freshmen when an overall composite of campus environment is desired. Students were often found to differ significantly on the Scholarship dimension as their major field of study differed. Somewhat surprising is the finding that students doing poor academic work did not differ significantly in their perceptions from students who were described as high achievers. Furthermore, college environmental perceptions do not differ significantly with variations in academic aptitude or personality characteristics (Pace, 1966b). In research it appeared that high school seniors and college freshmen show very little difference in perceptions of college environment (Pace, 1966b). This relates to the earlier evidence indicating that college freshmen are quite unrealistic in the environment they perceive.

In an attempt (Pace, 1967b) to determine the extent to which students in a complex university setting might differ in total environmental perception according to the subculture of which they were a part, the 300 items in the CCI were analyzed to find what categories of college environments was covered in what frequency. About half were found to be in a general student category with the remaining divided between academic and administrative areas. In CUES this imbalance was at least in part corrected. This instrument was then given to students in various fields at four major universities. Differences among different groups of students were found to be quite minimal except that: (1) a greater sense of Community was expressed by students describing their own sub-group than do students in general, and (2) student academic groups differ most from one another in their perceptions of the academic aspects of environment.

Work by Donald L. Thistlethwaite has substantiated a number of relationships relating to college environments. In the study completed in 1963 of 300,000 National Merit Scholarship Qualifying Test participants, Thistlethwaite was able to confirm that college press influences student motivation to seek advanced training for men but not for women students. Fourteen press scales were developed but because of some considerable overlap in scales, only five independent dimensions were found. The scales were found to be of no value in identifying or predicting which colleges will have the highest retention rates of talented college students (Thistlethwaite, 1965).

In another report, Thistlethwaite found significant correlations between certain College Characteristics Index scales and student productivity in the natural sciences, arts, humanities and social sciences (Thistlethwaite, 1959). In the most recent study Thistlethwaite (1965) developed both a "lowerclass" and an "upperclass" factor along with eight other factors, some of which also dealt wihh faculty press. Factor 1, "Excellence of Faculty in Major Field," showed high loadings on excellence of faculty teaching, faculty enthusiasm for intellectual values and faculty adequacy as positive role models. Factor 2, "Lowerclass Humanistic - Intellectual Press", suggests a strong relationship between college faculties that stress humanities and achievement and study bodies with similar values and goals. Some of the highest loadings of this factor were student press for estheticism, faculty press for achievement, faculty press for humanism and student press for competition.

Thistlethwaite was able to confirm two major hypotheses. The first was that student dispositions to seek advanced graduate study was found to be strengthened by their exposure to : (1) "excellent teachers or role models" in their major field (students who demonstrated this were mainly those whose major professors appeared to be role models sufficiently valuable to imitate and encouraged graduate work by their students); (2) "upperclass student subcultures," marked by an intellectual emphasis or by many other students having graduate school plans; (3) good grades and positive evaluation by professors; (4) undergraduate honors programs or enrollment in graduate school courses; (5) involvement in research while still an undergraduate; adademic awards or honors and the attendant social recognition (Thistlethwaite, 1965). In constrast, the other hypothesis indicates dispositions to seek advanced graduate study were weakened by: (1) strict interpretation of rules and regulations by faculty members; (2) vocational or practical emphasis by professors; and (3) social pressure from fellow students to become involved in various non-academic activities. A number of other hypotheses were partially confirmed.

A. W. Astin, who has taken a different approach to the measurement of environments (Astin 1962a, 1962b, 1962c, 1961, 1963), found that his environmental dimensions, factorially derived from 33 measures of institutional characteristics, were apparently related to the "Ph.D." producing rates of colleges and to student motivation. Astin and Holland (1961), found relationships between their environmental dimensions and College Characteristics Index scales. Relationships between Astin's environmental dimensions, Ph.D. aspiration, and social orientation were substantiated. Astin (1963) stated that " a more meaningful interpretation of such effects will depend ultimately on our ability to describe the college environment in terms of the experiences of the individual student," a concept basic to the theory of this study which is hypothesized in the three categories of variables discussed earlier under objectives.

The present writer, using certain College Characteristics Index scales and other measurements derived from these scales through factor and cluster analysis, has indicated (Hendrix, 1965) that the environments of colleges are related to the presence or absence of faculty personnel policies and procedures regarding academic rank, the achievement of tenure, and formal evaluation or merit rating systems. It was concluded that matters such as faculty rank and tenure are in fact part of the impact of the institution because they are perceived by students as a part of their environment.

Generally speaking, tenure of the faculty was found to be strongly related to low student press for change, interaction, activity and emphasis in areas not involving interpersonal and social relation.

Developments in the use of student press, exemplified by the publication of the College and University Environment Scales, have resulted in the identification of dimensions along which colleges actually differ, and established measurements more meaningful in relationship to colleges (such as "Awareness, Community, Propriety, Practicality and Scholarship"), rather than retaining primarily to psychological terminology descriptive of individuals. These techniques permit the measurement of the ways in which colleges differ "effectively," rather than relying on broad descriptive terms such as private, large, small, selective, difficult, etc. If researchers are to examine the extent to which educational enterprises change or cause behavior in students, the total "effective" environment which "presses" on the student must be considered.

Early in 1967, Pace published a report on the use of environmental measurements in junior colleges (Pace, 1967a). While there are some 1,200 baccalaurate degree granting institutions in the United States, there are now nearly 800 two-year institutions (AAJC, 1967). The increased number of these colleges along with the growth in their enrollments has prompted greater interest in development of accurate means to measure their environments. As mentioned earlier, CUES was developed for use in four-year colleges. Nevertheless, it has been used in junior colleges. By re-scoring some CCI data the present writer has combined information on CUES scores in junior colleges: 12 in California, 12 in Minnesota, and 8 in Texas. Pace reports that from this sample it was concluded that very few items in CUES were actually inappropriate for junior colleges. It was found, however, that "many of the items which discriminated very well between the environments of four-year colleges and universities did not discriminate at all well between the environments of the 32 junior colleges." The range of differences found within liberal arts colleges or universities was much greater than the range of differences within junior colleges. In other words, junior colleges tend to be more similar to one another than is true of four-year insitutions. Pace pointed out, however, that the evidence did not substantiate whether this apparent homogeneity was indeed true or whether the CUES dimensions failed to discriminate in this type of environment. Because the junior college devotes a considerable portion of its energy to two-year technical-vocational programs, Pace reported that a feeling exists that one or more new scales might be needed for junior colleges in addition to those already found in CUES.

## Basic Design and Prodecure

This section will not report in complete detail the procedure and methodology employed. Since the nature of this study required a rather large number of separate and functionally unrelated preliminary analyses, a more logical report results from discussing these as the occasion arises. Therefore, details of the procedure will appear in Chapters II, III, IV, and V. Additional details, basic data, and statistics are placed in appropriate appendices. References to these will be made as necessary. So that the reader may successfully integrate these details the general basic design and prodedures will be described in their section.

Since the unit of analysis is the individual college, the selection of the sample of colleges was the first necessary step in beginning the study. After reviewing relevant literature (Knoell and Medsker, 1964a, 1964b; Raines, 1964; Pace, 1963) the decision was made to limit the study to public junior colleges. At the time the study was started public junior colleges accounted for 61% of the institutions listed in the American Association of Junior Colleges directory (American Association of Junior Colleges, 1964). Since the public colleges are usually larger they accounted for 87% of the enrollment. Since that time the percentage of public institutions and the percentage of enrollments in public institutions have both increased (American Association of Junior Colleges, 1967). The decision to include only public junior colleges was based upon two primary considerations: (1) it was assumed that sufficient differences existed between public and private colleges so that the basic dimensions and results of the study would be quite different if private colleges were included. For example, very few private institutions would be comprehensive in nature, i.e., including technical and vocational programs, adult education programs, community services, etc. Most private institutions are quite selective and have quite specific and unique directions of emphasis. (2) The results of the study should be applicable to the majority of institutions and students enrolled in these institutions.

Consideration of intended statistical treatment indicated that a sample of approximately 100 colleges would provide sufficient reliability and sensitivity. Since the data requested required that at least one "class" of students should have been graduated from the usual two-year curriculum, this limited the population to those public junior colleges who were in operation and had students enrolled in September of 1962. The sample desired thus approximated one-fourth of the population as the study was started in the fall of 1964. For details of the sample selection procedures and results, Appendix A may be consulted. It is assumed that a sufficiently representative sample was selected, although certain deficiencies were unavoidable.

Six stratification variables were used in selecting the sample. Some of these were obvious and were shown to be important in other studies. (Raines, 1964; Knoell and Medsker, 1964a, 1964b; Pace, 1963). These were geographic location and size of the institution (student enrollment). Since the nature of junior colleges varies from state to state quite drastically (American Association of Junior Colleges, 1964; Martorana and Morrison, 1961) and since the size of junior colleges also varies quite extensively (from less than 200 to more than 25,000 students) (American Association of Junior Colleges, 1964), these were the two major stratification criteria. These restrictions upon the sample were obtained quite adequately as indicated in Appendix A, Table A2.

The other four selection criteria were considered to be of less importance but potentially related to the general problem of college environments. Accreditation, whether obtained from regional accrediting agencies, some form of state accreditation (State Department of Education, State University, etc.), or whether unobtained at all, could be indicative of the extent to which the college is influenced by other colleges and agencies or whether it may depend entirely upon its local community for approval and legitimation. For example, one might expect that colleges that have acheived regional accreditation might be more similar among themselves than colleges who have not achieved such accreditation. Also, there has been, within certain regions, certain pressures to develop and excel in certain kinds of programs (usually academic and transfer oriented) and less emphasis placed upon other types of programs (These differing emphasies also underline the importance of the regional criterion, although the regions in this study do not correspond exactly with the regions of the accrediting associations). The extent to which an institution is a residental or "commuting" institution is indicated in part by the percentage of full-time verses part-time students. This would have obvious implications for college environments. In many junior colleges part-time students are often employed, this being related to both curriculum patterns and environmental considerations. Curriculum patterns were classified as transfer only, terminal only or transfer and terminal. The nature of expected dimensions (Pace, 1963) dealing with scholarship, practicality, etc., suggested that such curriculum patterns be one of the selection criteria. For these reasons the presence or absence of an evening program and the presence or absence of boarding facilities was also used as a stratification variable.

In general, attempts were made to obtain a portional sample only on the marginals of the six stratification variables, rather than looking at combinations of the variables. A completely proportional sample on all six criteria considered simultaneously would have been impossible since the number of resulting "cells" would have exceeded the total population.

For further discussion of sample selection procedures please consult Appendix A. Table A4 lists the participating coleeges.

The basic design of the study involved the collection of thece sets of data. These are referred to as external determinants, junior college environments (internal determinants) and criterion measures. The first set of variables (external determinants) consists of three seperate subsets; (1) community characteristics, (2) student preferences for environmental elements and (3) faculty preferences for environmental elements. Procedural details are found in Chapter II and Appendices B, C, D, F, and G.

The only aspect concerning external determinants not presented in Chapter II and the related appendices is that concerning the magazine indices for "class,""education," and "value of home". These indices were developed and included in the analysis of community characteristics primarily as an aid to interpretation of the preliminary analyses. The computation of these indices will be described in general terms in Chapter II but since the data underlying these computations is not generally available to the public, and the conditions under which the original data permitting the computation of these indices was furnished by W. R. Simmons, Inc., New York, did not permit the presentation of sufficient statistics for replication and/or verification and as a result these indices were not used in the final analyses.

Procedures concerned with the preliminary analyses of the junior college environment data are found in Chapter III and Appendix E. Factor analytic techniques were employed to discover the basic dimensions underlying junior college environments and item analysis procedures were employed to refine the measurement of these dimensions with sufficient reliability.

Three basic data collection instruments were developed and completed by students and faculty members in the participating colleges. These instruments, Junior College Environment Scales, Student Preference Scales, and Faculty Preference Scales, are described in Appendix I. These three instruments have in common a pool of 300 items (the first 300 items in the JCES and SPS instruments) that are descriptive of possible college environments. These 300 items contain the 150 CUES items (Pace, 1963) and an additional 150 items developed by Pace and Hendrix (Pace, 1967a). (These items are copywrighted by C. Robert Pace and may not be reproduced without permission. Special permission was obtained for use of these items in this study.) One hundred of these items describe the administration, rules and regulation, facilities, services and other general features of the institution (items 1 to 100). Another 100 items refer primarily to academic and instructional concerns, teachers, teaching, classes, etc., (items 101 to 200). Another 100 items describe primarily the students and activities in which they engage (items 201 to 300).

It was intended that the Junior College Environment Scales be completed by 100 students at each college. The students would respond true or false to the 300 environmental items thus yielding description of the college environment in which they found themselves. A separate sample of 100 students was intended to complete the Student Preference Scales. These students rated each of the 300 items on a five point scale depending upon the extent to which they found the element to be preferable and desireable (rated as 1) or not preferred and undesireable (rated as 5). This permitted the students to describe the basic dimensions along which they valued college environments. Similarily, a sample of faculty members (the entire faculty or a maximum of 50 faculty members in larger colleges was intended) rated the desirability and preferability of each of the 300 items.

The actual number of useable instruments obtained from each sample at each college is described in Appendix J. The differences between intended numbers and expected numbers were attributable to several factors, the primary one being the length of the instruments. Although the Junior Collgege Environment Scale was to be administered only to other than first semester or quarter students, several such students, as indicated by responses to question number 304, did complete the instrument. These answer sheets were omitted from the analysis. Also, any student answer sheet (JCES and SPS) that appeared to have "patterned" responses (for example,the systematic alteration of true-false responses in the JCES) and any instrument that was not sufficiently complete (at least 250 of the 300 environmental items and at least 30 of the supplementary items in the JCES and SPS instruments) was omitted from the analysis. Two or three institutions found it quite difficult to administer the instruments due to scheduling problems and crowded facilities.

The instructions furnished to the institutional representative designated at each college regarding the administration of the JCES, SPS, and FPS, are reproduced in Appendix I.

An additional 44 items (items 301 through 344) are common to the two student instruments (JCES and SPS). Several of these items were included to verify information provided by the college or obtained from published sources (items 304, 307), or to permit the identification of any of the more likely systematic biases due to the student samples selected (items 301, 302, 303, 305, 306, and 309). Some of these items were also useful in providing data for purposes not directly related to this project (e.g., the description of student populations were useful in developing related projects) and instrument construction for other studies. Nineteen of the items permitted the students to express their satisfaction with the college. Items 308, 311 and 312 deal rather directly with satisfaction whereas items 329-344 deal more indirectly with satisfaction. These last 16 items permitted the student to express the extent to which he felt he was progressing toward a number of generally accepted educational goals. A number of these items are taken, some with alterations, from a previous study by Pace (1964). Other items were developed with junior colleges specifically in mind but being guided by the results of the Pace study. Another 16 items, 313-328, permitted the students to express the extent to which they participate in a number of activities usually found at colleges. These satisfaction items and activity items comprise part of the criterion battery described later in this report.

Four items were unique to the SPS instrument (items 345-348). Item 347 was included as a check upon the sample of student respondents. The other three items provided preliminary information for other studies. Answer sheet format limitations prohibited these items from being placed in the JCES.

The survey instruments which provided data for identifying the college district and service area and the computation of "output" measures are also found in Appendix I. These instruments were completed by the college president or someone desiginated by him, usually the registrar. In a few instances (see Appendix B) these instruments did not provide enough information to define the district per-service area. Direct correspondence and telephone conversations were then required. The calculation of "output" measures included in the criterion battery is explained in Chapter IV.

Procedural details of the final analyses are left until Chapter V.

## Plan of Report

The following three chapters describe the three basic sets of variables analized in this project. Chapter II describes the analysis and resulting dimension of the community characteristic variables, the Student Preference Scales, and the Faculty Preference Scales. These are conceptualized as "inputs". Chapter III describes the analysis and resulting dimensions of the Junior College Environment Scales. Chapter IV describes the criterion measures which consists of three basic subsets: "output" measures, satisfaction measures, and student participation in various activities. Appendices C, D, E, F, G and H contain most of the basic data and statiscial information upon which these chapters are based.

Chapter V describes the final analyses which examines relationships among the three primary sets of variables.

Chapter VI contains comments regarding implications of this research for junior colleges and for further research.

All bibliographical items to which references are made are listed in the section following Chapter VI. The method of citing references used in American Psychological Association journals is used throughout this report.

The appendices contain many of the basic tables describing the data and statistics on which the results are based. Most of the detailed treatment of procedures, including sample selection, data collection, and preliminary analyses of data, are contained in these appendices. Appendix I reproduces the instruments used in the study. Appendix J describes the methods by which reliability estimates were obtained and presents relevent statistics in tabular form.

# Chapter II

## External Determinants-Analysis and Discussion of Results

This chapter reports the analyses of the three subsets of variables referred to as external determinants. The analysis is described, with references to appropriate appendices, and the resulting dimensions are indicated. These three subsets are community characteristics (consisting primarily of data from the United States Census Publications), student preferences for environmental dimensions, and faculty preferences for environmental dimensions.

### Community Characteristics

Seventy-two items of data were collected for each junior college district and/or service area to describe the social, economic, demographic, etc., characteristics of the community. Most of these variables were obtained from U.S. Census Publications but some were derived from other sources. Two income indices (effective buying income per capita and effective buying income per household) were included from commercial sources. This source, however, based its estimates upon U.S. Census Publications and updates and projects its data for those years between the decennial censuses. Three magazine indices were also developed. These were not included in any of the variables selected for final analysis since they are not generally available for public use and there would be some question of their reliability. They were included in these preliminary analyses primarily to assist with interpretation of the results. For a complete presentation of the data collection procedures and sources consult Appendix B. Consult Appendix C for a complete presentation of the projection of all data to a common point in time (the 1964-1965 academic year) and the transgeneration of the raw data into the 72 variables finally used in these preliminary analyses.

The magazine indices (social class, education, and value of home) were developed through analysis of data provided by W.R. Simmons, Inc., New York. This company annually surveys the United States, with quite sophisticated sampling techniques, to gather data descriptive of the magazine reading, television viewing, and product consumption habits of the American public. These data are normally sold to advertising concerns, media research companies, and marketing research organizations. Availability of this data permitted the development of contingency tables which would have, as one axis, the socio-economic status of households (as determined by interviewers) using the Hollingshead Index of Social Position (Hollingshead et al, 1961). Along the other axis of the contingency table readership or nonreadership of a particular magazine would be indicated. The Simmons data permitted the development of such contingency tables for a number of magazines, including those identified in Appendix B. In addition to socio-economic status, a number of other variables were potentially relatable to magazine readership, including value of home and educational level obtained by head of household. After constructing contingency tables indicating relationships between these three socio-economic variables and readership of each of the magazines indicated in Table B, chi squares and coefficients of contingency were computed for each table. This permitted, for example, the identification of magazines that were read more often by households of higher socio-economic status (or education or value of home) but not by households of lower socio-economic status. Similarly it was possible to identify magazines that were read more often by lower socio-economic households than by those with higher status. Interestingly enough, very few of these "negatively discriminating" magazines are contained in the list of magazines in Appendix B. In general, "readership" was found to be associated with higher status, education, and value of home levels for most of the magazines. Some magazines discriminated better than others, however.

The magazine indices, computed on a county basis (see Appendix B), were constructed by selecting, for example in the case of education, the three magazines for which readership was strongly associated with higher educational levels and the three magazines most predictive of lower educational level. Using circulation statistics provided by the publisher or other sources (see Appendix B) the total circulation of the three high educational level magazines was determined for the county, or multiple county units where necessary. Similarily the total circulation of the three low educational level magazines was also determined. These two sums were then used to construct a ratio. The total high level circulation for a county was divided by the total low level circulation. Thus an index number positively correlated with education (or socio-economic status or value of home) was devised. In the event of service areas comprising two or more counties, the sums were developed for the entire service area before division.

Another reason for not including magazine indices in the final analyses is that they were not generally available for a time period coinciding with the other variables (see Appendix B).

The resulting variables were projected, using a straight line or regression line projection in most cases. Since the data provided by the colleges and the data obtained from students and faculty members was primarily for the 1965-66 academic year, the data was projected to represent the 1964-65 academic year. This decision wss made after consulting the rather meager literature dealing with relationships between community characteristics and other variable such as those in this project. Also, advice was solicited from Dr. Jay M. Gould, Sales Management Inc., New York and Mr. Richard Brumbach, W.R. Simmons Inc. These professionals were quite familiar with this type of data and its use in business and industry in forecasting sales, predicting results of advertising, etc.

The decision was made that a "one-year lag" was probably as reasonable as any other to assume. If one wishes to hypothesize that community characteristics or changes in these community characteristics are functionally related to environments within the college, the nature of student enrollment, outputs from the colleges, etc., it is pure speculation as to what time lapse should be assumed. For example, if the nature of manufacturing changes quite rapidly in a community within a short time, how long before these changes will show up in the nature of potential students, the operation of the college, needed changes and programs, etc.? Such questions are of great importance in many areas of the country. For example, many of the Southern California junior college districts are influenced quite immediately and often drastically by changes in the aero-space industry. Other colleges, subject to rapid in-migration of minority groups and other distinguishable population groups, such as New York and Los Angeles, are also likely affected by this process. To provide answers to this question was beyond the scope of this project. Some variety of analysis across time points would be necessary. Also, the "appropriate" lag time for various community characteristics would probably differ. For example, the in-migration effects might be felt immediately whereas changes in the industrial complex might not be felt for two or three years.

The best compromise seemed to be to project to the 1964 point described in Appendix C. This then assumed a one-year lag between community characteristics and the output measures furnished by the college. Depending upon the exact time that students and faculty members completed the SPS, FPS, and JCES instruments, the time lapse varied from one-half year to one and one-half years. Since the majority of students and faculty members completed their instruments during the fall semester or quarter of 1965, a one year lag period predominates.

As reported in Appendices B and D, the community data was collected using two different geographic bases. Upon first examination, it would seem most reasonable to select as the "community" the legal district of the college. This proved inappropriate since many of the colleges do not have legal districts, at least of a local nature, such as the New York State Agricultural and Technical Colleges and states with a "state system" of junior colleges, such as Minnesota, and Virginia. Also, many colleges serve a wider area than their legal district, since a large number of their students come from outside of the legal district. In multi-campus or multi-college districts, such as Los Angeles, the district boundaries again were not appropriate for defining the community.

Another reason for this decision was that many of the most potentially useful data, as indicated by examination of related studies, could not be gathered using only one or even a few types of geographic areas for which U.S. census data is available. For example, most of the variables associated with a county data base, as described in the appendices, are not available for all other types of geographic areas, such as census tracts, municipalities of various sizes, etc. Therefore, two geographic areas were defined for each college. The manner in which these were defined are described in detail in Appendix B, but briefly one consists of the legal district or service area of the college (data usually being gathered for these units using census tracts or cities) and a larger area (usually) using a county or counties. In a few instances these two areas would coincide exactly if the legal district of the college or the service area as determined was a county or multiple county area.

In order to determine the basic dimensions which describe junior college communities (considered as the aggregate of the district and/or service area and the larger county area), the principle component analyses with varimax rotation of the resulting dimensions as described in Appendix D were undertaken. Since the variables were from two seperate sources, these sources were each analyzed separately and then together. The district variables were then factor analyzed three times. First, the set of district variables shown in Table C2, minus the magazine indices and district size (variables 67-70) were analyzed; second, this set plus the magazine indices were analyzed; third , this set plus magazine indices and district size was analyzed. In each factor analysis fourteen dimensions appeared. These are summarized in Tables D1, D2, and D3. Three different factor analyses of county variables were also performed. First, the set of county variables shown in Table C2 less the magazine indices and county size (variables 68-71) were analyzed; second, this set plus magazine indices; third, this set plus magazine indices and county size were analyzed. In each factor analysis six dimensions appeared. These are summarized in Tables D4, D5, and D6. Two different factor analyses of the total variables were performed. First, all the community variables minus county population and district population (variables 67 and 71) were analyzed and second, the complete set of all 72 community variables, including county and district population, were analyzed. Seventeen dimensions appeared in both factor analyses. These are summarized in Tables D7 and D8.

The three representations of the content similar factors in each of the three groups of analyses were then examined to select the one whose factor loadings most effectively described the dimension. Furthermore, those factors within each of the three groups that were best delineated and most theoretically relevant to the study were selected for further consideration. This reduced the number of factors to twelve, three and six for the district, county and total variables respectively.

The final step in identifying dimensions to describe a communal environment was an intergroup content analysis. Essentially, each factor in a given group was compared with all the factors in the other groups to see if there was any content overlap between groups. By this process, thirteen factors were selected. These communal dimensions are described in the following paragraphs. The original factors related to each dimension are indicated after the title in parentheses, e.g., (D1, 1) refers to Table D1, factor 1. The underlined factor is the one used as a reference in the factor description.

Factor C1 - Class (D3,1 - D2, 1 - D1, 1)

This factor appears to measure class for a given unit area. The concept of class is a multi-dimensional phenomena which describes the status differentiation that exists in any unit area. The dimensions classify people in the unit area into different class categories. The dimensions that correlate highly on this class factor are:

(1) Income Indices. The loadings for this dimension ranged from percent of families with income less than $1,000 at .83 to percent families with incomes greater than $10,000 at -.48 with the other levels of income distributed somewhere between these values with a change from positive to negative taking place at the $4,000 income level.

(2) Education Indices. Percent of adults with no school years completed and those with very little education in the primary grades had positive loadings from .54 to .84 whereas individuals with junior high school and higher education had negative loadings from -.34 to -.60.

(3) Occupational Indices. Percent professional and clerical had negative correlations whereas privates, and farm laborers and laborers, had positive loadings ranging from .36 to .68.

In looking at the above list of characteristics one can find a reasonable and logical consistency across the dimension. Low income, little education and unskilled labor all correlate positively whereas higher income, more education and professional or skilled occupations correlate negatively. Therefore, a definite class distinction could be made on the basis of this factor.

For convenience in measuring this dimension the loadings are reversed so that higher scores are associated with higher class. Variables selected are those indicated as important by the principle component-varimax analysis and that had reasonable means and standard deviations so that they could be combined additively without weights. Using the numbers which identify the variables in Table C2 and throughout Appendix D, this factor is represented by: C1 = Class = 7 + 8 + 16 + 58 + 60 - 2 - 3 - 12 - 64 - 66.

### Factor C2 - Higher Education (D3,3 - D2,3 - D1,3)

This factor seemingly measures the amount of education for a given unit area, as distinct from the education content of Factor C1. The variables it contains seems to be quite straight forward in leading to this conclusion. The only variable contained in this factor outside of the levels of education, is the percent of professionals (-.48) and percent of operatives (.82). Inspecting the variables, which essentially are educational levels, with two variables from the occupational indices, we see higher education loading most strongly in the same directions as the professionals and the operatives loading the same direction as lower levels of education.

Since this factor appears to discriminate higher educational level, as opposed to the general educational level in the class factor, variable 18 was selected to represent this factor. (Again, for convenience, the factor is reversed and variable 18 is included positively).

C2 = Higher Education = 18

### Factor C3 - Mobility (D2,5 - D1,4 - D3,5)

This factor seems to measure the amount of social mobility in a given unit area. It has one negative loading of -.52 for percent craftsmen. The other five variables all have positive loadings with the highest at .68 for the percent unemployed, .64 for the ratio of rented to owned, the percent of non-white at .52, the percent males widowed and divorced at .44 and lastly, farm laborers and laborers at .32.

From inspecting these various loadings it can be seen that all tend to point to a community comprised of individuals lacking the ties and entanglements usually associated with a non-mobile group. The farm laborer and laborer as well as the non-white is, in most places, one whose services are not always required and therefore not marketable twelve months out of the year, forcing him to move from place to place in order to earn a living. A large ratio of rented to owned, indicates a more mobile population. Also, the percent males divorced and widowed and the percent unemployed correlated highly, tending to indicate people who are not tied down to one location because of family or occupational committments. On the other hand, it is fairly safe to assume that in most cases craftsmen have more commitments if no other than to their positions and occupations.

Three variables were selected to represent this factor, and since there was rather wide discrepancy among their standard deviations, two of them were weighted. Variables 21 and 57 are multiplied by 3 and from this is subtracted variable 62.

C3 = Mobility = $(3)\cdot 21 + (3)\cdot 57 - 62$

Factor C4 - Marital Status (D2,4 - D1,5 - D3,10)

This factor apparently measures the marital status of individuals in a given unit area. It is possibly the most clearly defined factor in the analysis. The loadings range from .33 for percent females widowed and divorced to .91 for the percent married individuals, with the other variables relating to marital status distributed between these two loadings. The other variables as they appeared were percent of males widowed and divorced, percent of widowed and divorced (total), percent males married, and percent females married. The percent of total married (variable 44) was selected to represent this factor.
C4 = Marital Status = 44

Factor C5 - Economic, Racial Discrimination (D2,11 - D1,6)

This factor appears to measure the amount of discrimination present in a given unit area. On this factor is found percent of non-white and amount of education correlated in the same direction. (Percent non-white correlates -.37, and percent adults with no schooling, 5-7 years of elementary and 4 years of high school correlate .31, .39 and -.32, respectively). Therefore, this factor seems to indicate areas of fairly well-educated Negroes but at the same time these Negroes still are found in more menial occupations. Loadings for percent private and percent services are -.49 and -.31, respectively. These are apparently areas in which Negroes are academically qualified for higher status occupations, but are not employed in them.

Again reversing the direction of the factor, variables 10 and 64 are combined positively with variable 13, which is negative. Thirteen is given a weight of 2 and variable 64 is given a weight of 5.
C5 = Discrimination = 10 + (5)64 - (2)13

Factor C6 - Industrial Unionization (D2,13 - D3,12)

This factor estimates the amount of industrial unionization. The four variables and their loadings were as follows: Percent owned homes greater than $15,000 at -.68, percent farm laborers and laborers at -.61, sales occupations at .34, service occupations at .47. It seems reasonable to describe this factor as industrial unionization for two reasons. First it was found that in the category of farm laborers and laborers the majority of individuals of this category were the laborers. Thus this factor seems to define areas where there are many laborers with homes of $15,000 or more but many people in sales or service. It seems quite reasonable then that the people in sales and service have not the ability to demand and therefore earn wages necessary for the purchase of homes in this price range, whereas the laborer through unionization not only has demanded but has attained an income of sufficient size to purchase and maintain homes in the price range of above $15,000. Also it should be noted that service and sales occupations are, in most cases, not unionized as thoroughly as industrial laborers. Furthermore in this study (see Table D9) only one third of the sample had homes of value greater than $15,000. In most cases a home in this price range would be expected of the professional or highly skilled rather than the laborer. It is on the basis of this information and reasoning that this factor has been labeled as the industrial unionization factor (or the blue-white collar factor).

Again, in order to estimate this factor the dimension is reversed. Variables 66 and 19 are combined positively with Variables 61 and 65, which are negative. In order to account for the wide differences in standard deviations Variable 19 was given a weight of 16 and Variables 61 and 65 are given weights of 3.
C6 = Industrial Unionization = 66 + (16)19 - (3)61 - (3)65

### Factor C7 - Housing Imbalance (D2.9 - D1,10 - D3,4)

This factor contains three variables with the following loadings: percent vacant housing units (.79), percent housing units with one or more person per room (.81), and percent population over 65 (-.41).

This factor describes an area in which many units of housing are vacant whereas those which are inhabited are quite crowded. The third variable which is negatively correlated with this factor, supports the above conclusion since one would not find many persons per room in crowded living conditions where the majority of the inhabitants were of age 65 or older. Such crowded conditions would be expected more with the large family situation in which case there would be a large number of younger rather than older inhabitants.

To estimate this factor Varialbe 27, with a weight of 2 is added to Variable 28 from which is subtracted Variable 37 with a weight of 3.
C7 = Housing Imbalance = (2)27 + 28 -(3)37

### Factor C8 - Young Families (D1.11 - D2,10 - D3,11)

The variables and their loadings in this factor were as follows: percent of population 35 to 65 years old (-.87), percent of population older than 65 years (-.83), percent less than five years old (.85), percent 20 to 24 years old (.76), percent of males widowed and divorced (-.59), percent of females widowed and divorced (-.76), percent of families with income $1,000 to $1,999 (-.41), percent of families with income $7,000 to $9,000 (.34), percent of families with income $10.000 (.36), percent adults with eight years elementary education (-.41), and percent rentals greater than $100 (.56).

In view of the age variables and the negative loadings the divorced and widowed variables have on this factor, it seems reasonable to assume that this factor indicates the number of young families in a unit area. Higher education and substantially higher income also have loadings in the same direction as those which indicate young families (age and "unmarried" variables). These variables seem to specify the factor to a certain extent. It probably measures fairly "successful" young families. (Successful is used sociologically, since these families occupy median positions within the status hierarchy in the community.) It also seems reasonable to assume that younger families would be more inclined to rent rather than own their living units and this is substantiated by the positive correlation of percent of rental units greater than $100 with this factor.

To estimate this factor Variable 29, 33, 34 and 35 are added and Variables 36, 37, 39 and 40 are subtracted. Since the two sets of age group variables 35 years and above and below 35 years possess fairly equal standard deviations when thus combined, these approximating the standard

deviations for the "unmarried" variables, no weights were used.
C8 = Young Families = 29 + 33 + 34 + 35 - 36 - 37 - 39 - 40

As indicated earlier, the preceeding eight factors appeared most clearly in the analyses of district variables. Examination of Appendix D indicates very little overlap in content with the county variable factors. The following three factors, however, appeared most clearly in the analyses of county based variables (Table D4, D5, and D6).

Factor C9 - Suburban Areas (D6, 1 - D5, 1 - D4, 1)

This factor seems to describe a typical suburban area. This conclusion was developed from consideration of the following factor loadings: The percent of county population in rural areas had a correlation of -.54 and county population had a correlation of .54, indicating a fairly well populated area. However, "average farm value and average dollars spent per farm on hired labor had correlations of .56 and .55, respectively--indicating the presence of farms in the described areas. Farms are usually found just outside the periphery of suburban areas. The magazine index for class had a correlation of .87. Here we see social class increasing as the magnitude of this dimension increases for any unit of analysis. This probably corresponds to the empirical fact that social class increases as we go from urban to suburban areas and from rural to suburban areas. The magazine index for education has a correlation of .93. More educated people are usually found in suburban, as opposed to urban or rural areas. The magazine index for home value has a correlation of .86. Again, the value of homes in suburban areas is generally higher than in either urban or rural areas. Three income related variables - Effective Buying Income (EBI) per capita, EBI per household, and retail trade (general merchandise) are significantly present in this factor. This probably indicates the greater wealth found in suburban areas. Expense per capita for police has a correlation of .53, indicating the suburbanite's willingness to allocate tax money for police protection to "keep their neighborhoods safe," even at the greater expense generally required in suburbs.

In order to estimate this factor variables 22, 26, 47, 49, 50, 52 and 71 were added. Variable 22 was given a weight of 2; variable 47 was given a weight of 100; variable 49 was given a weight of 1/100; variable 50 was given a weight of 1/5; variable 52 was given a weight of 10; and variable 71 was given a weight of 1/2000. From these was subtracted variable 24 with a weight of 20.
C9 = Suburban Areas = (2)2 + 26 + (100)47 + (1/100)49 _ (1/5)50 + (10)52
+ (1/2000)71 - (20)24

Factor C10 - Large Farms (D6, 2 - D4,3 - D5,2)

The variables which best delineate this factor are the following; population per acre (.46), average farm size (-.82), average farm value (-.34); average dollars spent per farm on hired labor (-.26).

As population per acre decreases it can be assumed the land is likely to be used for agricultural purposes. The last three variables qualify the previous statement by indicating that we are dealing with the larger more prosperous, farms.

To estimate this agricultural factor variable 48 is added with a weight of 1/2 and variable 25 is subtracted with a weight of 2000.
C10 = Large Farms = (1/2)48 - (2000)25

### Factor C11 - Consumption (D6,3 - D5,3 - D4,5)

This factor describes the amount of goods and services purchased by people in a given unit area. This is clearly indicated by the loadings for the various retail trade per capita variables. In addition, EBI per capita and EBI per househould have loadings of .39 and .33, respectively.

Again reversing the dimensions for convenience this factor is represented by the addition of variable 51 and 22.
C11 = Consumption = 22 + 51

It should be noted that whereas the first eight factors, derived primarily from the district variables, most often found their most useful definition in Table D2 where they were combined with the magazine indices, the last three factors, based on county variables, found their most meaningful descriptions in Table D6 which included magazine indices and county population. The last two factors find their most meaningful description in the analyses for combined county and district variables.

### Factor C12 - Income (D7,1 - D8,1)

This factor measures the income level of families in the unit areas. The basis for this conclusion are the following loadings: percent of family income correlations range from .45 for percent of families with income < \$1000 to -.71 for percent of families with income > \$10,000; and rental ≥ \$100 has a correlation of -.63; EBI per capita has a correlation of -.81 and EBI per household has a correlation of -.75; expense per capita for police has a correlation of -.88 (if we hold crime rate constant, income should be significantly related to police expense per capita.); average farm value has a correlation of -.69 and average dollars spent per farm on hired labor has a correlation of -.65 (these two factors are good indicators of wealthy farms); retail trade per capita (general merchandise, apparel and accessories) has a correlation of -.67; magazine index for education has a correlation of -.72 (Education is usually significantly related to income.); magazine index for value of the home has a correlation of -.76 (home value is also a good indicator of income).

Another dimension included in this factor is the urban-rural dichotomy. Urban areas seem to be related to high income and rural areas low income.

This factor is represented by the addition of variables 7-9 and the subtraction of variables 1-5. Since this results roughly in a dichotomization of the income dimension no weights are used. Again, the direction of the dimension is reversed. Other measures could have been included in the definition of this factor but since the highest loading variables pertain to income and many of the other variables have often been used in other factors, it was decided to let this remain a "pure" income dimension. Also, this made it unnecessary to combine in one factor estimate district and county based variables.
C12 = Income = 7 + 8 + 9 - 1 - 2 - 3 - 4 - 5

## Factor C13 - Urbanization (D8, 13)

The loadings on this dimension, which account for a generous proportion of the variance, recalls many of the previous factors in both the county and district base analyses. It appears to be sufficiently unique to be included in its own right. Examination of the loadings seems to indicate that this factor measures the urbanization that exists within the county base area. The loadings for percent non-white, ratio of rental to owned housing units, income measures, trade, expense per capita for police, etc., and the low positive loading for percent of county population in district, illustrates adequately the large city which accounts for much of the county area and population.

This factor is represented by the addition of variables 10, 21, 24, 26, 47, 52, 57 and 71. Variable 21 is given a weight of 30, variable 26 a weight of 1/10, variable 47 a weight of 10, variable 57 a weight of 100, and variable 71 a weight of 1/10,000. From this is subtracted variable 72 with a weight of 2.

C13 = Urbanization = 10 + (30) .21 + 24 = (1/10) 26 + (10) .47 + 52 + (100) .57 + (1/10,000) .71 - (2) .72

The weights used in estimating these dimensions would approximate quite closely actual variable weights on factor scores for the dimensions if they had been computed. Similiar studies that have "simplified" weightings have usually produced simplified scores that correlate with the exactly computed scores in the high .90's. This procedure has the advantage of using original data, which simplifies any potential use that might be made of these analyses in colleges not included in this sample, makes the interpertation of content more meaningful, and does not insist upon the orthogonality which characterizes the dimensions as they are produced by the principle component-varimax analysis.

Summarizing the nature of these 13 dimensions, it might be said that they bear enough resemblance to similarly derived factors in other analyses to give confidence, but they are unique enough to indicate that communities containing public junior colleges apparently differ from other geographic units. Also, an unknown amount of this difference must be attributed to the particular variables which were available in this study. Many of these were the same as those in other studies, since census data is often used for such purposes, but there are differences due to the nature of the geographic units for which data could be gathered. Also, many studies that have performed similar analysis used single indicators of a type of variable, e.g., only families or persons with an income above a certain figure rather than percent families or persons within a number of income catagories to represent "income".

One of the most useful studies that guided the selection and analysis of these variables and assisted with the interpretation of the results, was that by Miner (1963). During preliminary stages of this investigation several variables were selected from those used by Miner and subjected to principal component analysis with varimax rotation. Miner reported the correlation matrices (pages 98-99, 154-155) for 25 variables were eliminated since they were not applicable to the current study or the necessary data were not available for communities containing junior colleges. The resulting factors are reported in Appendix H, Table H1.

The first factor, identified by positive loadings for income, property values, median years of education, percent children in private schools and percent in district 5 years or less and with negative loadings for percent of population non-white and under 18 years of age, resembles most closely the "class" factor described earlier (Factor C1). The second factor obtained from the analysis of Miner's data is characterized by positive loadings for percent of students in secondary grades, percent in private schools, with negative loadings for percent of population in district 5 years or less and percent of population under 18 years of age. This dimension is similar in nature to Factor C3, Mobility, and Factor C8, Young Families. Factor III in Table K1 appears to be a general "size-density" factor. Nothing directly corresponding to this appeared in the junior college data, although certain factors are related (Factor C13, Urbanization, Factor C9, Suburban Areas). This general size factor, which is quite common in analyses of this variety, failed to appear in the junior college analysis for several probable reasons. First, a rather large number of variables are involved thus the "variance dominating" nature of the size variables were to some extant less dominant. Second, since junior colleges are typically found in larger communities, there would be relatively less variance on this type of variable than in studies involving school districts, counties, municipalities, etc. Examination of the statistics in Table D9, Appendix D, indicates that these size variables (variable 67, population in district, and variable 71, county population) cover quite an extreme range but that the distributions are quite skewed and peaked. Finally, the method of analysis described in this chapter and Appendix D was selected to deliberately avoid this factor.

Another study that provided useful information in the planning and interpretive stages of this report is that of James (1963). Again, a number of variables were taken from James's report and subjected to principal component analysis with varimax rotation. This is reported in Appendix H, Table H2. Six factors were identified by analysis of the 20 selected variables describing California school districts. The first factor from James's data again appears to be a "class" factor strongly influenced by employment. This appears to be related to the industrial unionization dimension of the current analysis, Factor C6. A closer correspondance to Factor C6 is found in the second dimension obtained from the James data. This second factor is largely determined by percent of the civilian labor force in manufacturing. Factor III of Table H2 indicates again a general class dimension but with emphasis upon income and employment in white collar jobs. All three of these factors indicate a "class" dimension, each relating to slightly different employment and income characteristics. Since the sample James used is rather unique (limited to California and heavily weighted by the two large population centers in California,) the prepondrence of these employment-income-class dimensions is not surprising.

Factor IV is also unique and might be called a "drop-out" factor since the two variables loading most heavily on this factor are drop-outs after entry into the 10th grade and the rate of deliquency. Factor V might be called a "regard for education" factor since it is largely determined by absenteeism and college attendance. This is related to Factor C2, Higher Education, in the present study. Factor VI, as in the Miner data, appears to be a size or population dimension.

Another useful study dealt with a sample of municipalities in the greater New York metropolititan area (Wood, 1961). Wood applied factor analytic techniques to 20 socio-economic variables and 14 fiscal variables for a sample of 64 "middle-sized" New Jersey municipalities. Varimax rotation was used. Wood identified 6 major dimensions. Factor I was size, this being determined by population, property evualation and state aids. Factor II was a "land reserve" factor characterized by land area, saturation of the area, and valuation of vacant land. Although the nature of the units and variables are quite different, this appears to be related to Factor C9, Suburban Areas, and Factor C10, Large Farms, of the current analysis. The third dimension described by Wood is an age factor, this being determined by percent of population over 65, percent of population under 14, and percent with earnings under $2,000. Factor IV is described by Wood as a residental affluence factor, largely determined by median years of education and median income. This, of course, has similarities to several of the factors in the current study and others, due to its general class connotations. Density, determined mainly by percent of multi-family buildings is the fifth factor Wood discusses. As explained by Wood, this has some relationships to the suburban area factor and the general urbanization factor in the current study. The final factor presented by Wood is primarily determined by the percent of land used industrially and could be called an industrialization factor. Again, although different units and variables are involved, this appears to be related to Factor C6, Industrial Unionization.

Finally, the work done by Scevky and others (1958) led to the development of three indices related to both dimensions in this study and those described in others. An Index of Social Rank, largely determined by occupations, education, and rental values, and Index of Urbanization, largely determined by single family dwelling units, women in the labor force, fertility, and industrial and manufacturing production, and an Index of Segregation determined by changes in age, sex and racial distributions, are of apparent content similarity to several of the factors in this study, such as Factor C5, which indicates economic and racial discrimination.

In general, this analysis produced dimensions consistent with similar analyses using different geographic units. The same general dimensions (especially a general class factor) appear to be quite similar. Several "unique" dimensions were obtained, however, these appearing to be in the nature of "residual dimensions" from some of the general dimensions. For example, a class factor is present (Factor C1) but in addition there are separate factors describing Higher Education (Factor C2), Industrialization (Factor C6), Housing (Factor C7), and Income (Factor C12). Several of these dimensions are undoubtedly attributable to the large number of variables used in this analysis. This allows the general dimensions to appear with the residual dimensions which more finely discriminate among the 100 communities (e.g., income and housing). Other dimensions probably appear due to the wide-spread national nature of the sample rather than being restricted to relatively limited geographic areas as was true of the other studies mentioned (e.g., Mobility, Economic and Racial Discrimination, Suburban Areas, Large Farms, etc.). One of the more interesting dimensions to appear is that descriptive primarily of Higher Education (Factor C2). This component of a general class factor as differentiated from general educational level and the educational level dimension is perhaps a more important dimension in discriminating among communities characterized by junior colleges than other types of geographic units. If junior colleges indeed popularize and encourage higher education, and if this differs from college to college, some differences among communities would be expected.

In preparation for the final analyses, scores on these 13 factors were computed for each college using the indicated formulas. Descriptive statistics for these indices will be found in Chapter V, Tables V1 and V2. Descriptive statistics for the 72 variables from which these indices were calculated are found in Appendix D.

## Student Preferences

Two basic dimensions characterize the student preferences for junior college environments. The procedures by which these dimensions were identified among the 300 preference items in the student preference scales is described in Appendix F. After identifying an initial set of four basic dimensions and selecting clusters of items which best define these dimensions, reliability estimates for the resulting scales were computed as described in Appendix J. Any scales that could not yield reliabilities equal to or greater than .90 were not used.

The items were rated using a five point scale as described in Appendix I. A rating of 1 indicated most preferable and a rating of 5 indicated the least preferable response to an item. Scale scores were computed on individuals by adding the individual item ratings. All of the factors were unipolar in nature.

### Scale S1 - Scholarship and Intellectual Environment

A total of 48 items were selected to represent this dimension. Varimax rotation, and examination of the item content, indicated that there were three distinct sets of items within this dimension. The overall meaning of this scale is assisted by examining these three subsets separately. The first subset of items are:

[illegible] Students here learn that they are not only expected to develop ideals but also to express them in action.

115. Careful reasoning and clear logic are valued most highly in grading student papers, reports, and discussions.

128. In some courses students have an opportunity to organize a group project.

131. Many of the natural sciences professors are actively engaged in research.

133. Course offerings and faculty in the social sciences are outstanding.

134. Students can take a semester or year abroad as part of their regular program.

136. Most of the instructors are dedicated scholars in their fields.

137. There is considerable interest in the analysis of value systems, and the relatively of societies and ethics.

140. Programs of study about a particular area or region are offered - such as Latin American studies, Russian studies, etc.

161. Most courses are a real intellectual challenge.

173. Many instructors assign projects which call for group work.

187. Tutorial or honors programs are available for qualified students.

193. In many classes there is a course outline or study guide for the students.

195. Courses that fulfill general education or distribution requirements fit together to give students a well rounded experience.

This subset is similar to Pace's Scholarship dimension (Pace, 1963) in that it indicates a serious concern on the part of students in ideas and in pursuing knowledge. However, this particular factor seems to measure more the desired conditions within the college that make this endeavor possible for the students attending a given school than the existing attitudes toward scholarship within the college.

First, the students prefer that the faculty be very involved in their subjects - interested in improving their knowledge of fields through research (items 131 and 136 above), and other scholarly activities. And, as is usually the case, they perceive a knowledgable and enlightened professor as that much better able to interest and stimulate his students in the areas he is teaching (refer to item 133). The organization of the curriculum and courses also seems conducive to intellectual interests are those concerning student-faculty communication and class participation. Not only are faculty members interested in probing and criticizing ideas, but they are concerned with communicating these ideas to the students. There is also a chance for the students themselves to participate in the learning process as active members (items 134 and 173), thus increasing a feeling of belonging to and identification with given courses of study and their main objective: the pursuit of knowledge.

A number of other variables seem to specify this factor. The seem to indicate an intellectual interest in social relations and events and the reasons for and behind them. Again, the items describe the conditions which promote this interest, but we also find items which directly express favorable attitudes toward seeking knowledge in given areas. (Items 133, 134, 137 and 140.)

The second subset of items defining this factor are:

2. There is a well organized and effective job placement office for the graduating students.

23. Most people here seem to be especially considerate of others.

25. Some places on campus are nicely arranged for small informal gatherings.

27. There is a lot of group spirit.

28. In many buildings there are coffee lounges or other pleasant spots for conversation.

29. Counseling and guidance services are really personal, patient, and helpful.

35. Students are encouraged to be independent and individualistic.

63. Most students find that the library is easy and convenient to use.

65. There are lots of quiet and comfortable places for students to study.

67. Laboratory facilities in the natural sciences are excellent.

69. Typically the library is open until 10:30 p.m. or later.

78. Pleasant rooms are available for student clubs and other organizations.

85. The student health center or counseling bureau includes psychiatric services.

87. There are many facilities and opportunities for individual creative activity.

Whereas the preceding subset of items, except for one item, came from the section of the instrument which deals with courses, teaching, etc., this subset of items comes entirely from the section of instrument which deals with general characteristics, facilities, administration, rules and regulatoon, etc. This set of items seems to indicate another aspect of Pace's Scholarship dimension. The prefered environment is one of free and independent thinking--freedom from conventional bounds of the community which restrict and narrow one's perspectives in solving problems.

Students prefer that opportunities for study be readily available (items 63, 65 and 69), thus indicating a general interest in intellectual pursuits. Other items (25, 28, and 65) denote that some desirability is placed on aesthetics, pleasant surroundings, etc. Item 85 could indicate the necessity of services to assist the independent mind over insecurities created by rejection from conventional others. Another item which might seem at first hard to integrate with the other variables is item 27. Probably, however, the group spirit mentioned is that which centers around the commonly desired intellectual and academic freedom.

The third subset of items defining factor S1 are:

50. The college has a reputation for good manners.

71. The school helps everyone get acquainted.

74. The campus design, architecture, and landscaping suggest a friendly atmosphere.

76. The main emphasis in freshmen orientation is on developing a sense of membership in the college community.

80. This school has a reputation for being very friendly.

101. Education here tends to make students more practical and realistic.

105. The vocational value of many courses is emphasized.

107. The big college events arouse enthusiasm among the faculty as well as the students.

130. Many faculty members are active in community work - churches, charities, schools, service clubs, etc.

147. A major aim of this institution is to produce cultivated men and women.

174. The instructors go out of their way to help you.

175. The college regards training people for service to the community as one of its major responsibilities.

176. In most classes students quickly learn everyone's name.

198. Instructors clearly explain the goals and purposes of their courses.

205. Campus leaders really know how to get things done.

206. The big college events draw a lot of student enthusiasm and support.

223. Many upperclassmen play an active role in helping new students adjust to campus life.

224. Activities in student organizations are carefully and clearly planned.

225. Most students seem to have a genuine affection for this school.

226. There are often spontaneous little parties to celebrate pleasant events.

These items appear from all three of the major sections of the instrument which deal with general characteristics, curriculum and teaching, and student characteristics and activities. This subset of items appears to describe a variety of social integration or cohesion.

Blau and Scott define social cohesion as the strength of the network of social bonds that unite members of a group (Blau, 1962). The items best defining this factor seem to measure the amount of social integration, through friendship bonds, that exists within a junior college (items 174 and 176). Items 76 and 225 lend additional support to the supposition since they both are social-psychological measures of cohesion; that is, they measure the degree to which the students identify with the college.

If the first two subsets of this factor are conceptualized as primarily indicating the content of a preferred environment (scholarship, especially in matters of a social nature, intellectual activity, interest, and freedom) the third set might properly be conceptualized as providing the means by which the content is achieved (primiraly through interactions among and between students and faculty).

Scale S2 - Sociability

All of the 33 items defining this factor pertain to students and student activities. This major dimension along which student preferences differ, seems primarily concerned with social relationships with other students, student activities, and many of the typically college enterprises such as student government, rallies, demonstrations, etc. This dimension can be divided into two subsets of items which assist in understanding the nature of the factor. The first subset of items are:

252. There are lots of dances, parties, and social activities.

253. New fads and phrases are continually springing up among the students.

254. There is a recognized group of student leaders on this campus.

258. Student elections generate a lot of intense campaigning and strong feeling.

260. Most students are interested in business, engineering, management, and other practical careers.

267. Election to a science honory society is a real mark of distinction.

268. Most students here are really bright.

270. Students are very serious and purposeful about their work.

271. Groups of students from the college often get together for parties or visits during holidays.

273. Many students are interested in and give support to such causes as Red Cross, Campus Chest, CARE, or Blood Banks.

275. There are frequent informal social gatherings.

278. Student groups often meet in faculty members' homes.

282. Groups of students sometimes spend all evening listening to classical records.

286. Many students are interested in joining the Peace Corps or are planning, somehow, to spend time in another part of the world.

291. Spontaneous student rallies and demonstrations occur frequently.

294. Many students drive sports cars.

300. Students frequently do things on the spur of the moment.

Although the dominant concept among these items is social relations and activities mainly with other students, several items indicate that these activities and relationships are directed toward what might be regarded as serious, purposeful, concerns, not unrelated to the educational goals of the college (items 267, 268, 270, 286, 278, etc.).

The second subset of items also indicates a preference for sociability but these preferences do not have the serious, purposeful, educational, goal directed concerns in the first subset. These items are:

215. A lecture by an outstanding scientist would be poorly attended.

250. Few students bother with rubbers, hats, or other special protection against the weather.

251. Students spend a lot of time worrying about what kind of jobs they can get.

259. It's important socially here to be in the right club or group.

265. Students are sometimes noisy and inattentive at concerts and lectures.

266. There is very little studying here over the week-ends.

269. Few students here would ever work or play to the point of exhaustion.

279. Most students respond to ideas and events in a pretty cool and detatched way.

284. The student newspaper rarely carries articles intended to stimulate discussion of philosophical or ethical matters.

288. Few students are planning post-graduate work in the social sciences.

289. A lecture by an outstanding literary critic would be poorly attended.

290. To most students here art is something to be studied rather than felt.

292. The person who is always trying to "help out" is likely to be regarded as a nuisance.

293. Students often start projects without trying to decide in advance how they will develop or where they will end.

294. Many students drive sports cards.

297. Most student rooms are pretty messy.

298. Many students seem to expect other people to adapt to them rather than trying to adapt themselves to others.

This subset of items, if considered a separate factor, could be entitled "academic irresponsibility". This subset seems to measure the extent to which the student subgroup includes members who have not adapted to and internalized the values of the academic world. This situation, plus the additional circumstance that most junior college students are in the process of breaking ties with their families, probably lends to the lack of regard for obligations and responsibilities indicated by the items.

A general indication of the lack of felt obligations to other people is item 298. More specifically, many items indicate a lack of involvement in the academic community and therefore an absence of a motivation to pursue knowledge and develop one's capabilities in a given area of study (items 215, 265, 289, 266, 269, 279, 284, 288, 290).

Another indication of these student's failure to develop academic attitudes is item 293. Here we see the absence of a general regard for planning ahead which usually develops a secondary aspect of one's collegiate studies. Other items indicate irresponsibilities which probably develop as a result of making the transititon from parental supervision to a more independent college life (items 250 and 297). These items describe behavior patterns which are usually formulated by parental disciplining. Indications of an identification with the social world of a college campus, probably related to their lack of identification with the academic world, is indicated by the items 259 and 294.

Finally, a group emotional reaction to the thought of not applying oneself in college is indicated by item 251 which states, "Students spend a lot of time worrying about what kind of jobs they can get."

Since these two seemingly conflicting subsets empirically appear on one basic dimension, one possible yet discomforting implication is that, to some extent, these two aspects of sociability are functionally related. If it can be assumed that one aspect cannot be changed without being accompanied by changes in the other, this has rather troublesome implications for student personnel activities.

For the 1000 students used in developing these dimensions Factor S1 yielded a mean of 88.1 and a standard deviation of 23.4 whereas Factor S2 evidenced a mean of 89.0 with 21.7 as a standard deviation. The factors exhibit a correlation of +.04, which indicates that the dimensions are effectively orthogonal. Mean scores for each college were computed and used for the final analyses in Chapter V.

These dimensions closely approximate, in content, the two dimensions developed during pilot studies, although different procedures and samples were used (Hendrix, 1966). The pilot studies used the College Characteristics

Index (CCI) which has 150 items, except for slight changes, in common with the SPS these being the 150 items in College and University Environment Scales (CUES). This strength of resemblance lends credence to these dimensions.

## Faculty Preferences

Almost identical procedures were used to identify items which define the basic dimensions along which faculty preferences differ. The 300 items were arranged into three batteries of 100 items each and subjected to principal component analysis with varimax rotation using every fourth faculty member beginning with the first. Using the weights developed from the first analyses, factor scores were computed for every fourth faculty member beginning with the second. These factor scores were correlated with the item scores to permit the selection of item clusters. Four clusters of items were selected and subjected to further principal component analysis with varimax rotation to clarify the dimensions. This was done using every fourth faculty member beginning with the third. Finally, total scores were developed, items were correlated with total scores, and reliabilities were computed using the final fourth of the sample. Only two clusters of items survived these analyses with sufficient reliability for use. Further information and tables concerning these analyses will be found in Appendix G. The two dimensions, consisting of 20 and 31 items respectively, are described below.

### Scale F1 - Students

In this set of items the faculty seem to describe the type of student body it would prefer to deal with. Fifteen of the items are from the third part of the instrument which is concerned with characteristics of the students, student activities, etc. Five of the items are from the second part of the instrument which describes characteristics of the curriculum, teaching, courses, etc. Examination of these five items, however, indicates that student characteristics or behaviors are involved. The items defining this scale are:

120. Personality, pull, and bluff get students through many courses.

154. Some of the instructors react to questions in class as if the students were criticizing them personally.

167. Everyone knows the "snap" courses to take and the tough ones to avoid.

170. It is fairly easy to pass most couses without working very hard.

172. The way most exams are given it would be easy for a student to cheat if he wanted to.

204. Student rooms are more likely to be decorated with pennants and pin-ups than with paintings, carvings, mobiles, fabrics, etc.

215. A lecture by an outstanding scientist would be poorly attended.

219. Students who work hard for high grades are likely to be regarded as odd.

241. Students occasionally plot some sort of escapade or rebellion.

249. Students pay little attention to rules and regulations.

251. Students spend a lot of time worrying about what kind of jobs they can get.

259. It's important socially here to be in the right club or group.

265. Students are sometimes noisy and inattentive at concerts and lectures.

266. There is very little studying here over the week-ends.

284. The student newspaper rarely carries articles intended to stimulate discussion of philosophical or ethical matters.

290. To most students here art is something to be studied rather than felt.

293. Students often start projects without trying to decide in advance how they will develop or where they will end.

294. Many students drive sports cars.

297. Most student rooms are pretty messy.

298. Many students seem to expect other people to adapt to them rather than trying to adapt themselves to others.

Although it is seldom helpful to describe a dimension in the "negative" this appears to be the most logical method of interpreting this cluster of items. In other words, the faculty members appear to be describing a student population that they would not prefer.

These items seem to be describing a college in which there is clearly a lack of concern for academic achievement within the student subculture. The pursuit of knowledge occupys a low position in the heirarchy of student values. Their main interests, which may be considered the reverse side of the same coin, are demonstrating their newly found freedoms and participating in the social activities of the college. This emphasis on the "social" aspects of a college and de-emphasis of scholarship is indirectly indicated by items 204 and 206.

Other items (167, 215, 219 and 284) in this scale directly express the lack of concern in academic achievement on the part of the student subgroup. Items 259 and 294 indicate the students' greater interest in the "social life" of the campus.

Another aspect of this unpreferred student subculture, which is related to the students' greater concern with "social" matters, is their defiance of the established norms governing college activities as indicated by items 241, 249 and 297. Finally, other items indicate that the organization of most courses at the college allow many of the previously mentioned student attitudes and behaviors (items 120, 170 and 172).

As was true with the SPS dimensions previously described, it must be remembered that lower scores on these scales are associated with preference, whereas higher scores indicate less desirable characteristics. For this FPS scale its description as a set of characteristics that are not preferred must be remembered when the scale is used in the final analyses.

### Scale F2 - Liberal Arts

The items which best define this dimension appear to describe, at the "preferred" end of the dimension, a small, friendly, intellectually active and socially responsible college community. An observer might conclude that the faculty members would prefer to be in a college quite similar to the usual stereotyped concept of the small, selective, liberal arts college. The following items define this dimension.

17. New ideas and theories are encouraged and vigorously debated.

23. Most people here seem to be especially considerate of others.

28. In many buildings there are coffee lounges or other pleasant spots for conversation.

34. Special museums or collections are important possessions of the college.

35. Students are encouraged to be independent and individualistic.

39. There is a lot of interest here in poetry, music, painting, sculpture, architecture, etc.

65. There are lots of quiet and comfortable places for students to study.

78. Pleasant rooms are available for student clubs and other organizations.

85. The student health center or counseling bureau includes psychiatric services.

87. There are many facilities and opportunities for individual creative activity.

113. Courses, examinations, and readings are frequently revised.

114. Most courses require intensive study and preparation out of class.

115. Careful reasoning and clear logic are valued most highly in grading student papers, reports, and discussions.

118. Class discussions are typically vigorous and intense.

121. There are always a lot of faculty members at student events - such as sports, parties, concerts, plays.

123. Many courses are designed to prepare students for well informed citizenship.

178. There are courses or voluntary seminars that deal with problems of social adjustment.

182. There is a lot of variety and innovation in the way many courses are taught.

184. The school offers many opportunities for students to understand and criticize important works in art, music, and drama.

187. Tutorial or honors programs are available for qualified students.

188. Quite a few faculty members have had varied and unusual careers.

189. A lot of student discussion is generated by courses in government, politics, and international relations.

206. The big college events draw a lot of student enthusiasm and support.

214. Students put a lot of energy into everything they do - in class and out.

232. Concerts and exhibits always draw big crowds of students.

235. Many students here develop a strong sense of responsibility about their role in contemporary social and political life.

238. Many student groups invite faculty members to lead special discussions.

240. Students are actively concerned about national and international affairs.

261. Students set high standards of achievement for themselves.

280. Student organizations are very open and friendly and not at all exclusive.

283. Quite a few students develop close friendships with foreign students.

The smallness of the institution is indicated by the items describing the friendly and cohesive relationships which would exist within the college. The student-faculty relationships are mutually supporting and satisfying and the general atmosphere of the college connotes a feeling of friendliness. The following items are indicative: 23, 78, 121 and 280. Emphasis on both practically oriented and scholarly-oriented courses and activities is expressed by the following items: 85, 123, 178, 34 and 184. This set of items probably best discribes the "liberal arts" concept as it involves both the scholarly study of social and cultural phenomena as well as the preparation of students to function effectively among the indicated social and cultural phenomena.

This scale, at its preferred pole, clearly describes a college in which there would be a great stress on scholarship. Environmental conditions, both social and physical, encourage the pursuit of knowledge and independent thinking. Students in turn would tend to internalize these values and would thus be personally motivated toward academic achievement, e.g., items 35 and 87. Other items indicate that courses, examinations, and class discussions are indeed organized to promote independent and scholarly thinking (items 113, 114, 115, 118, and 187). Moreover, the college facilities offer opportunities to study and discuss course materials, e.g., items 28 and 65. The influence of these conditions is evident in the students' voluntary participation in intellectual activities (items 17, 235 and 240).

A student subgroup in which individual members have internalized the value of "academic success" is preferred. Students are personally motivated to pursue knowledge, to take an active part in their own education. Ideas and theories of the different academic disciplines are enthusiastically discussed, shared and debated outside of the classroom, e.g., items 189 and 238.

For the final group of 779 faculty members used in calculating reliabilities, coefficients of .85 and .92 were obtained, respectively for scales F1 and F2. Scale F1 produced a mean score of 78.6 with a standard deviation of 10.2, whereas scale F2 produced a mean score of 53.5 with a standard deviation of 13.8. The two scales are correlated -.47.

It is not surprising that this basic set of 300 items produced only 2 sufficiently reliable and interpretable scales when used for preference ratings (by both students and faculty) as opposed to items describing an actual environment. The 150 CUES items were, of course, developed primarily as items to be characterized as true or false by samples of students describing their environments. Most of the 150 additional items, although not constructed specifically with environmental description in mind, are evidentally more functional along these lines. Also, for the faculty members, the items do not obviously pertain to their most direct environment. In other words, these are items which are relevant to college environments as perceived by students, less relevant to possible characteristics of colleges as preferred by students, and least relevant to the environment of faculty members, either perceived or preferred. The difficulty with which dimensions could be developed with these items, especially for faculty members, indicates that future research must distinguish student environments more directly from faculty environments and perceived environments from preferred environments.

## Summary

This chapter reports the analyses of three subsets of variables referred to as external determinants. These three subsets are community characteristics, students preferences for environmental dimensions, and faculty preferences for environmental dimensions.

In order to formulate a number of community dimensions believed functionally related to the nature of college environments and the outputs of colleges, seventy-two items of data dealing with the social, economic and demographic charactaristics of the community were collected for each junior college district and/or service area. This data was then subjected to factor analysis. The dimensions which appeared were further analyzed to select those dimensions which were best delineated and most theoretically relevant to the study. By this process, thirteen dimensions were selected.

One of the most important community dimensions which appeared measures social class. Income, education and occupation, which are three social structural variables generally taken as operational definitions of social class, were significantly correlated with this factor. More specifically, another dimension chosen indicates the educational level of people from a given unit area.

The marital status of people of a given unit area and the age characteristics of families of an area are represented by two other factors. Six categories of marital status ranging from percentage female widowed and divorced to percent total married individuals were correlated with the marital status factor. Another factor describes the extent to which young families are present. Positive correlations of the younger age categories and negative correlations of the widowed and divorced classification with this dimension clearly indicate this conclusion.

Two relevant factors related to the distribution of the population of a unit area were labeled "mobility" and "housing" imbalance. The mobility dimension describes a region in which many individuals are not committed to local occupational or social groups, but are generally "on the move." The presence of both a number of vacant housing units and crowded housing in the same area suggests that our second factor describes a unit area in which one finds a disproportion between available houses and occupancy.

Two particular aspects of the economic organization of a unit area are presented in two other factors. Racial discrimination with respect to occupational opportunities is measured by one dimension since education of non-white was negatively correlated and occupational status was positively correlated with this factor. A second dimension indicates the degree of industrial unionization existing within a given area. This conclusion was reached as a result of the positive corralations with this factor of both level of wages and percentage of laborers in a given unit area.

The general nature of the communal structure of a given area is indicated by two other factors. One dimension describes the presence or absense of suburban areas. A fairly large population, the presense of farm lands, high income families, a high education level conservative values characterize the region measured by this dimension. The high loadings of percentage non-white, ratio of rental to owned housing units, trade and population density on the other factor of this set are characteristics which define an urban area.

Another dimension, which deals with rural areas, measures farm size. Not only is average farm size significantly correlated with this factor but two other variables connoting large farms are also significantly correlated. These two were average farm value and average dollars spent per farm on hired labor.

Two final factors selected for this study deal with the monetary process of a given unit area. The first dimension in this set indicates the amount of goods and services purchased (consumption) in a given region. The second factor measures the amount of income possessed by families. In addition to the income categories, farm value, retail trade and home value were also significantly correlated with this dimwnsion.

The next set of external factors which were obtained by factor analysis concerned student preferences for different aspects of the college environment. Two basic dimensions appeared: (1) Scholarship and Intellectual Environment and (2) Sociability.

The Scholarship and Intellectual Environment dimension indicates a serious concern by students for the assimilation of knowledge. More specifically, this factor measures the desired conditions within the college that make this endeavor possible. Students prefer enlightened and knowledgable instructors who are interested in communicating their ideas to the students, a chance to actively participate in the learning process, and opportunities for independent thinking - free from the conventional bounds of the community. A final subset of items in this dimension indicates that these objectives are achieved by a network of social bonds that unite members of the college community.

The Sociability dimension pertains to student relationships and activities. This dimension was divided into two opposing but correlated subsets. Serious and purposeful activities (discussions, group meetings, etc.) directed toward scholarly goals characterize the items defining one aspect of this dimension. Another subset of items describes purely social phenomena, some of which might be called "academic irresponsibility." There is a general lack of involvement in the academic aspects of the college community with greater stress on purely social, friendly, types of interactions among students.

Two basic dimensions appear to characterize the preferences faculty members express. The first of these dimensions is concerned primarily with the nature of the student body. In general, faculty members appear to not prefer students that are not interested in the basic business of the college, i.e. academic achievement. Students interested primarily in social activities, especially of more frivolous, non-constructive varieties, are not desired. Although no items describing the opposite or preferred end of this dimension appeared in the analysis, such characteristics may be inferred. In general, faculty members would evidently prefer intelligent, serious, purposeful, dedicated, goal oriented students, as opposed to those previously described.

The second faculty preference scale appears to describe a "liberal arts" dimension. This almost stereotyped picture of the small, selective, intellectually active liberal arts college is located at the preferred end of this dimension. Involvement and concern in social and cultural issues and problems are characteristics of the college community in general. Friendly individual and group interactions are indicated between and among faculty members and students.

# Chapter III

## Junior College Environments - Analysis and Discussion of Results

In this chapter the analysis of the 300 items, responded to by students on the Junior College Environment Scales, and the resulting major dimensions which characterize public community junior colleges are reported. Further details of the analysis and data will be found in Appendix E. Information concerning the reliabilities of these scales will be found in Appendix J. A listing of all items and the instructions given the student respondents may be found in Appendix I.

The subsample of 95 colleges described in Appendix A was used for the original principal component analyses with varimax rotation that identified the major dimensions reported later. This sample of 95 institutions was necessitated by delays in securing data from some of the colleges. If the analysis had been delayed until all returns were secured the project would have been placed considerably behind schedule. To have repeated the analysis with 100 colleges would have been too expensive. As indicated in Appendix A, the 95 college sample is as representive as the 100 college sample. There appears to be no particular sampling bias present in the 95 college sample as opposed to the 100 college sample. Also, the absence of 5 colleges made little difference in the signifance of loadings upon the dimensions, etc. All of the item analysis procedures used to refine these dimensions, used the entire sample of 100 colleges. A detailed explanation of the procedures used in defining these dimensions is found in Appendix E. Briefly, the percent answering true (of those responding to an item) was computed for each item on each of the 95 colleges. The 300 items were divided into 3 separate batteries of 100 items each for principal component analysis. After these three analyses were subjected to varimax rotation factor scores were computed on each factor for each of the colleges. The factor scores were then correlated with the item percentages thus enabling the correlation of any item with any factor to be estimated. This permitted the selection of factors that were the same, in terms of content, in each of the three batteries, and the selection of items that loaded highly on these factors common to the three analyses. Each of these sets of items, which potentially defined one of the major dimensions, were then themselves subjected to principal component analysis with varimax rotation to further simplify the dimension and to identify subsets of items within the major dimension. At this point the direction of an item's correlation with the major dimension was taken into account in order to establish a key for each scale. This score was developed by adding the number of items that were responded to in the keyed direction by 2/3 or more of the persons answering that item. From this was subtracted the number of items that were responded to in the keyed direction by 1/3 or less of the respondents at the college. A constant, the number of items temporarily included in this scale, was added to eliminate negative numbers, for computational convenience. Thus, with these initially determined scale scores, the score for any particular college could range from zero (all of the items answered by 1/3 or fewer of the respondants in the keyed direction) to twice the number of items in the scale (all items responded to by 2/3 or more of the respondents in the keyed direction). Item percentages, in the "keyed" direction, were correlated with total scale scores, this giving an indication of the extent to which individual items discriminate. Except in a few instances, items that correlated less than .50 with a total scale score were eliminated. Other items were eliminated if they had excessively small standard deviations or extreme means. These analyses were done three times, with the addition and deletion of items, to arrive at the final scale as described. The reliabilities of all scales are greater than .86 and are reported in Appendix J. The frequency distributions of item correlations for the scales were computed using the +1, 0, and -1 "scores" for each item. Since this technique was used to compute scale scores and also used in the computation of reliability coefficients, it was more appropriate to list the correlations in this manner. Thus, many of the items have correlations less than .50, which was not the case when real percentages were used (see Table J2).

Four major dimensions were identified. The items defining each of these dimensions will be listed with a description and discussion of the dimension. In the item listings, the letters in parentheses following each item indicate the key; e.g. for a (T) item, if 2/3 or more of the respondents at a college answer true, the appropriate scale score is increased by +1.

### Scale E1 - Conventional Conformity

This first major factor appears to be, at first examination, a combination of the CUES Community and Propriety scales. This is not too unexpected since these scales, for the sample of four year institutions, are moderately correlated. Items associated with the CUES Awareness dimension are conspicously absent.

Familiarity with public junior colleges grants this dimension a high degree of face validity. In general, this dimension appears to describe a community (in the sociological sense) self-generated and self-maintained propriety (codes of behavior, conformity patterns, reward and punishment systems, etc.). There appears to be a consciousness by students of group pressures. One might describe this as analagous to the mob or gang types of press patterns, except on a much larger scale and obviously directed to toward more socially desirable direction. This dimension describes the college as a community in which persons activelv participate in many ways and to varying degrees. The right to participate, however, must be earned through conforming to the group mores. Continued participatoon and sanction demands continued conformity to these mores. Acceptance by and inclusion in the group depends to a large extent upon conformity. There is little room in the group social system for displays of individualism.

The following items describe the general character of this dimension. Two additional subsets of items will be listed later. The subsets help to clarify the overall meaning of this scale.

16. Important recognition is given to students who achieve scholastic honors. (T)

23. Most people here seem to be especially considerate of others. (T)

26. Students' midterm and final grades are reported to parents. (T)

30. Graduation is a pretty matter-of-fact, unemotional event. (F)

44. Students are expected to report any violation of rules and regulations. (T)

47. Nearby churches have an active interest in counseling and youth programs. (T)

60. Religious activities on campus stress service to God and obedience to His laws. (T)

61. Excellence in scholarship is the dominant feature of this college. (T)

70. The school is outstanding for the emphasis and support it gives to pure scholarship. (T)

71. The school helps everyone get acquainted. (T)

76. The main emphasis in freshmen orientation is on developing a sense of membership in the college community. (T)

80. This school has a reputation for being very friendly. (T)

94. What is regarded as right and wrong is quite clear on this campus. (T)

96. Well established ways of doing things are important here. (T)

104. Faculty members are very punctual and expect the same from students. (T)

107. The big college events arouse enthusiasm among the faculty as well as the students. (T)

123. Many courses are designed to prepare students for well informed citizenship. (T)

130. Many faculty members are active in community work - churches, charities, schools, service clubs, etc. (T)

143. Many faculty members are active in the local churches. (T)

196. Most faculty members attend church regularly. (T)

199. Proper standards and ideals are emphasized in many courses. (T)

221. When students run a project or put on a show everybody knows about it. (T)

268. Most students here are really bright. (T)

Sociologically this factor seems to describe a college community resembling Riesman's tradition - directed society (Riesman, 1961) and Tonnies' Gemeinshaft society (Tonnies, 1887). Life on this campus is governed by a number of well-established standards and ideals which create a disciplined and traditional social structure. Items 94, 96, and 104 are especially descriptive of this type of social organization. Interaction among students and between students and other college personnel and the personal nature of these interactions seem to account for the acceptance and internalization in group norms. This interaction maintains a large amount of visibility by all those participating of group activities. This leads to two important circumstances: (1) Through extensive observation of normative behavior, all members of the social structure have knowledge of the norms and values obtaining within the social order. (2) With a large amount of visibility of the role performance of members, fellow members and those in positions of authority in particular are better able to sanction deviant behavior. Items 44, 71, 2C2, 221, and 229 indicate this visibility.

Two primary subsets of items were discovered. These subsets clarify the overall concept of this dimension and describe the subgroups or systems in which students may participate and conform. The first subset of items in this dimension appears to be concerned with the groupings and activities by which the formal goals and objectives of the college are accomplished.

22. Very few things here arouse much excitement or feeling. (F)

50. The college has a reputation for good manners. (T)

102. Most faculty members really know the regulations and requirements that apply to student programs. (T)

147. A major aim of this institution is to produce cultivated men and women. (T)

175. The college regards training people for service to the community as one of its major responsibilities. (T)

205. Campus leaders really know how to get things done. (T)

224. Activities in student organizations are carefully and clearly planned. (T)

225. Most students seem to have a genuine affection for this school. (T)

274. In student activities and organizations there is a strong feeling of group loyalty. (T)

Items in this subset indicate social and cultural concerns as well as classroom associated goals. Other items describe the interactions among students and between faculty members and students. The organization activities, regulations, etc., associated with student groups, activities, clubs, etc. are indicated. Items 102 and 147 indicate acceptance of the main goal of this establishment - functional scholastic achievement.

A second subset of items is concerned primarily with the informal social activities of students and faculty. Proper mores governing student activities such as dating, parties, events such as sports, concerts, etc., are stressed. Faculty participation in such activities, many varieties of informal student-faculty interaction, and the socialization of new students by deliberate efforts of the upper classmen are described.

24. The history and traditions of the college are strongly emphasized. (T)

27. There is a lot of group spirit. (T)

48. There are established rules of conduct for student activities, especially dating. (T)

73. Proper social forms and manners are important here. (T)

93. Student parties, whether in campus buildings or not, require administrative approval. (T)

97. Students ask permission before deviating from common policies or practices. (T)

121. There are always a lot of faculty members at student events - such as sports, parties, concerts, plays. (T)

177. Students often run errands or do other personal services for the faculty. (T)

179. A number of students get well acquainted with faculty members' families. (T)

202. Most students know who's who in campus politics. (T)

206. The big college events draw a lot of student enthusiasm and support. (T)

223. Many upperclassmen play an active role in helping new students adjust to campus life. (T)

229. Students exert considerable pressure on one another to live up to the expected codes of conduct. (T)

254. There is a recognized group of student leaders on this campus. (T)

Another important characteristic of this scale is that students have internalized the norms and values of the social structure; as opposed to rebelling or deviating from the rigid, and thus many times frustrating, requirements present within the college community. This conclusion is evident in the obedience to common practices, identifications with the school and esprit de corps expressed in items 27, 78 and 97.

The second feature which seems to account for the internalization of these seemingly rigid rules is the friendly and personal nature of social relationships. The sentiment of liking is a powerful force in creating a willingness to obey the dictates of those liked. Items 71, 80, 174, 179 and 223 indicate the presence of these friendly relationships.

An environment closely related to the CUES dimension of Scholarship is also implied but the items clearly indicate a group pressure for work and achievement rather than one resulting from individual inititative or external pressures such as grades and other threats. The main motive dictated by the systems of norms seems to be scholastic achievement, especially assimilating knowledge which will assist in functional performance of one's community roles. Items 16, 61 and 123 indicate this.

Also implied in this scale is interaction among the college, the local community, other community agencies, faculty, and students, that generally results in implied behavior codes. Again the general picture is one of friendly, worthwhile, socially desirable participation in groups, which in turn exacts a measure of control over the individuals range of activities. One main feature of this type of college social structure is the close relation it has with the community. This situation could probably partly account for the existence of the system of conventional norms within the college's social order. Items 26, 47, and 130 show this relationship.

### Scale E2 - Internalization

The second major dimension resembles the CUES scale of Awareness but with greater emphasis upon individual and personal aspects. A general awareness of social, cultural, political, artistic, philosophical, issues and problems is evident but the combination of other items emphasize generally an awareness of issues and problems as they either affect or might affect the individual student. Many of the items indicate an awareness through participation rather than intellectual study or awareness. Awareness through involvement and through relatively common everyday experiences appears to delineate this "awareness" dimension from the senior college awareness dimension. When the nature of junior college students, as compared to the majority of senior college students, is taken into consideration, this makes sense. In general, junior college students come from lower socio-economic families, are less concerned and experienced in abstract intellectual treatment of issues and problems, and often have a wider variety of experiences (military, work,,etc.) than students in more selective and academically oriented instructions.

This dimension also represents a combination of the CUES Scholarship and Awareness dimensions. It seems to define a continuum of types of ideas a given college is interested in transmiting to its students. At one end of the continuum we find an emphasis on developing an abstract, logically closed system of ideas and at the other we find a concern for developing practical, concrete ideas which will facilitate present and future adjustment to the everyday world.

Also, we find a common characteristic present in all of these pursuits - an emphasis on learning through participation and involvement in the learning experience.

17. New ideas and theories are encouraged and vigorously debated.(T)

39. There is a lot of interest here in poetry, music, painting, sculpture, architecture, etc. (T)

65. There are lots of quiet and comfortable places for students to study. (T)

82 Many famous people are brought to the campus for lectures, concerts, student discussions, etc. (T)

87. These are many facilities and opportunities for individual creative activity. (T)

113. Courses, examinations, and readings are frequently revised. (T)

119. Course offerings and faculty in the natural sciences are outstanding (T).

126. There are courses or voluntary seminars that deal with problems of marriage and the family. (T)

128. In some courses students have an opportunity to organize a group project. (T)

135. Modern art and music get little attention here. (F)

137. There is considerable interest in the analysis of value systems, and the relativity of societies and ethics. (T)

140. Programs of study about a particular area or region are offered - such as Latin American studies, Russian studies, etc. (T)

155. The college offers many really practical courses such as typing, report writing, etc. (T)

157. Many courses stress the speculative or abstract rather than the concrete and tangible. (T)

166. There is a lot of interest in the philosophy and methods of science. (T)

178. There are courses or voluntary seminars that deal with problems of social adjustment. (T)

182. There is a lot of variety and innovation in the way many courses are taught. (T)

183. Many faculty members have worked overseas or frequently traveled to other countries. (T)

184. The school offers many opportunities for students to understand and criticize important works in art, music, and drama. (T)

189. A lot of student discussion is generated by courses in government, politics, and international relations. (T)

231. Many students have traveled overseas. (T)

235. Many students here develop a strong sense of responsibility about their role in contemporary social and political life. (T)

238. Many student groups invite faculty members to lead special discussions. (T)

240. Students are actively concerned about national, and international affairs. (T)

262. The main emphasis in most departmental clubs is to promote interest and scholarship in the field. (T)

286. Many students are interested in joining the Peace Corps or are planning, somehow, to spend time in another part of the world. (T)

A general interest is indicated in the pursuit of knowledge and understanding of historical, artistic, social, political and philisophical phenomena. Conditions necessary for these purposes and an active participation in the learning process are also indicated. Items 17, 65, 113, 128, 135 and 238 are examples.

Another aspect of this dimension is an awareness of intellectual interests of primarily social and philosophical origin. Conflicting values and social conflicts are of major concern. The emphasis, however, is not toward finding answers or solutions to these problems in an intellectual sense, but understanding and adjusting to their presence as a matter of controlling one's own welfare. This could be called an inner-directed awareness. The individual concern seems to be "How will it effect me?" "How shall I respond?"

A concern for independent and speculative thinking is evidenced mainly regarding those ideas which will facilitate adequate functioning in future social roles. This type of academic concern would probably be situated in the middle of the previously mentioned continuum. Again, participation in the learning experience is stressed. Illustrative items are 87 and 119.

Another characteristic of this scale could be called outer-directed awareness of social, cultural, and artistic concerns. Involvement and participation is of less importance than study and the analysis of social, cultural, and artistic phenomena. Related items indicate interest in probing and speculating about abstract ideas in a logical manner; in understanding the meaning and essence of things. Empirical and experimental verification of these ideas is not stressed. Interest in disciplines which are least empirically based (poetry, theology, music, philosophy) and therefore open to more free thinking and speculation, is present. This type of academic thinking would be at one extreme of our continuum. Some items indicating these characteristics are 157 and 184.

A final variety of "awareness" items focuses almost completely on the individual. This might be called self-awareness. Emphasis is placed upon self-fulfillment, adjustment, and the development of practical skills primarily of a social nature. Items such as 126, 195 and 178 define the type of academic thinking which would be situated at the opposite end of the continuum defined in the previous paragraph. Emphasis is placed on obtaining knowledge that will best serve the practical purpose of assisting in the adjustment and adequate performance of ones future roles in society.

### Scale E3 - Maturation

The third scale appears to be concerned primarily with what might be called growth, maturity, responsibility, etc. This factor contains a number of items from the CUES Scholarship scale, indicating activities in the work and achievement area, the Propriety scale, indicating the development and maintenance of rules of behavior, and the Awareness dimension, indicating a degree of personal involvement, concern and interest.

4. Anyone who knows the right people in the faculty or administration can get a better break here. (F)

9. Everyone has a lot of fun at this school. (T)

29. Counseling and guidance services are really personal, patient, and helpful. (T)

35. Students are encouraged to be independent and individualistic. (T)

45. The prevailing atmosphere is one of quiet good taste. (T)

92. Students here learn that they are not only expected to develop ideals but also to express them in action. (T)

95. The Dean of Students office is mainly concerned with disciplinary matters. (F)

99. There always seems to be a lot of little quarrels going on. (F)

115. Careful reasoning and clear logic are valued most highly in grading student papers, reports, or discussions. (T)

120. Personality, pull, and bluff get students through many courses.(F)

136. Most of the instructors are dedicated scholars in their fields.(T)

141. Faculty members are always polite and proper in their relations with students. (T)

145. Students are always quiet and attentive in class. (T)

154. Some of the instructors react to questions in class as if the students were criticizing them personally. (F)

160. The values most stressed here are open-mindedness and objectivity. (T)

161. Most courses are a real intellectual challenge. (T)

165. Most of the instructors are very thorough teachers and really probe into the fundamentals of their subjects. (T)

168. In their own lives, faculty members are excellent examples of scholarship and intellectual interests. (T)

170. It is fairly easy to pass most courses without working very hard. (F)

171. Most of the faculty are not interested in students' personal problems. (F)

174. The instructors go out of their way to help you. (T)

195. Courses that fulfill general education or distribution requirements fit together to give students a well rounded experience. (T)

246. Students are conscientious about taking good care of school property. (T)

249. Students pay little attention to rules and regulations. (F)

261. Students set high standards of achievement for themselves. (T)

267. Election to a science honorary society is a real mark of distinction. (T)

270. Students are very serious and purposeful about their work. (T)

276. Most of the students here are pretty happy. (T)

293. Students often start projects without trying to decide in advance how they will develop or where they will end. (F)

295. Most students show a good deal of caution and self-control in their behavior. (T)

This dimension could describe "junior college inner-directedness." We see a college environment which encourages the development of what Riesman (1961) calls "inner-direction." Riesman describes an individual whose source of motivation and direction comes from the individual himself as a result of internalizing generalized goals early in his life (in this case "early" includes the college years). This concept is seen more clearly if we compare it with other-directed individuals. For these people, their contemporaries are the source of direction and the goals toward which this individual strives shift with this guidance. Specifically, the college seems to play the function of developing this inner-directedness by encouraging independence and logical and practical reasoning in order to achieve these "maturation" goals. Illustrated items are 35 and 115.

That this factor describes inner-directedness depends on stressing the development of knowledge and practical reasoning capacities which will facilitate effective and efficient performance of the duties and obligations of roles in a community society. Items 29, 92 and 195 indicate this.

Another indication of the emphasis on practical inner-directedness concern faculty and courses. First, one important necessity of formal education in order to inculcate inner-direction is qualified teachers. This is present within the "high scoring" college described by this scale as indicated by items 136 and 165. Second, the friendly and helpful relationships that exist between students and faculty facilitate the communication of ideas and logical techniques necessary for inner-direction. Items indicating this are 141, 171,and 174. Third, is the college emphasis on knowledge and logical thinking as a necessary condition to succeed in one's course work. This is indicated by items 115, 120 and 170. There is also evidence that students have developed practical inner-direction. Items 261, 293 and 295 support this.

High scores on this scale indicate an environment in which self-determination and direction are encouraged and valued. Maturity, responsibility, personal growth, development of interests, allocation of effort and time, are areas of concern. The development of job skills, social skills citizenship, etc., are encouraged. All areas of life are touched upon, but the primary area of concern has to do with the formal educational program (course work, study, achievement, etc.) of the institution. Items such as 4, 35, 95, 99, 115, 120, 154, 170 and 249 further illustrate this.

Items 9, 45, 92, 171, 174, 246, 261, 267, 279 and 276 appear to describe how the overall press of this factor is to be achieved. This set of items is clearly dichotomous. At one end it seems responsibility, maturity, growth, etc., is to achieved through imposed controls and restraints on the students. One might characterize the institution as parernalistic, maternalistic, lacking confidence in its students, etc. This is , of course, accompanied by a certain amount of disorder and confusion. Disciplinary problems would be expected. The other end of this group of items indicates an increase in responsibility, maturity, etc., brought about by encouraging independent action and analysis, self-control, individual responsibility, etc. Such an institution might be characterized as employing "non-directive" techniques. Fewer disciplinary problems and a greater amount of general order and well being is to be expected. Several items descriptive of the student body are quite prominent.

Scale E4 - Humanism

Items defining this scale are:

8. There is a lot of apple-polishing around here. (F)

167. Everyone knows the "snap" courses to take and the tough ones to avoid. (F)

176. In most classes students quickly learn everyone's name. (F)

204. Student rooms are more likely to be decorated with pennants and pin-ups than with paintings, carvings, mobiles, fabrics, etc. (F)

208. New jokes and gags get around the campus in a hurry. (F)

209. Students typically help one another with their lessons. (F)

215. A lecture by an outstanding scientist would be poorly attended. (F)

218. Even in social groups students are more likely to talk about their studies than about other things. (T)

222. Students spend a lot of time together at the snack bars, taverns, and in one another's rooms or homes. (F)

227. There is a great deal of borrowing and sharing among the students. (F)

230. It's easy to get a group together for card games, singing, going to the movies, etc. (F)

233. A controversial speaker always stirs up a lot of student discussion. (T)

239. There would be a capacity audience for a lecture by an outstanding philosopher or theologian. (T)

243. Students rarely get drunk and disorderly. (T)

248. Some of the most popular students have a knack for making witty, subtle remarks with a slightly sexy tinge. (F)

266. There is very little studying here over the week-ends. (F)

281. A number of student organizations sponsor discussions and demonstrations about national issues. (T)

282. Groups of students sometimes spend all evening listening to classical records. (T)

289. A lecture by an outstanding literary critic would be poorly attended. (F)

299. Dormitory raids, water fights, and other student pranks would be unthinkable here. (T)

300. Students frequently do things on the spur of the moment. (F)

This factor seems to be describing a student body interested in discussing, sharing and debating ideas and theories of philosophy, politics, music, theology, etc., outside of the classroom. Student extracurricular activities involve such concerns as group discussion, attending lectures by men of science, and visits to art galleries. Emphasis is on group participation as opposed to individual activities, in these extracurricular academic activities. Items 215, 218, 239 and 282 exemplify these characteristics. However, there exists a lack of social cohesiveness within the student body as demonstrated by items 176, 209, 227 (all scored false). Items 222 and 230 indicate general lack of interest in social activities and items 243 and 299 seem to indicate that destructive and mischievous activities are especially unpopular (which would be expected if there was a great concern for constructive academic activities such as debate, discussion and sharing of academic subjects).

Table III-1

Intercorrelations of JCES Scales
for 100 Colleges, with Reliabilities
in the Diagonal Elements, Means and Standard Deviations

| | Scale | | | |
|---|---|---|---|---|
| Scale | E1 | E2 | E3 | E4 |
| E1 - Conventional Conformity | (.94) | .06 | .49 | -.31 |
| E2 - Internalization | | (.88) | .33 | .39 |
| E3 - Maturation | | | (.91) | .37 |
| E4 - Humanism | | | | (.86) |
| Scale Mean | 54.1 | 24.9 | 45.2 | 14.2 |
| Scale Standard Deviation | 11.6 | 6.4 | 6.1 | 4.9 |

The reliabilities of each scale are found in Appendix J, Table J2. The complete orthogonality present in the factors that resulted from the original preliminary analyses (consult Appendix E) has been reduced. This necessarily accompanies the selection and equal weighting of items and the scoring techniques chosen. The four dimensions are, however, still considerably independent and the correlations are in the expected directions. For example, Scale E1 and E4 would be expected to exhibit a negative correlation whereas the remaining scales would be expected to exhibit moderate positve correlations. These resemble the inter-correlations among the orignial CUES scales (Pace 1963).

Since the scores in this preliminary analysis used the college as the unit of analysis, these dimenions are already in proper form for use in the final analyses described in Chapter V.

## Summary

The Junior College Environment Scales questionnaire was administered to students at 100 colleges. The responses from 95 of the colleges to the 300 items constituting this instrument were then factor analyzed. Four main dimensions appeared. Item analysis and reliability studies were done using all 100 colleges. The first factor , E1, Conventional Conformity describes a campus community resembling Tonnies' Gemeinschaft society. Life on the campus is governed by a number of well-established standards and ideals which create a disciplined and traditional social structure. The second factor, E2, Internalization, defines a college which stresses the awareness and internalization of issues and problems of the day. The main object of such stimulation, however, is not to have students obtain knowledge for the sake of just being "knowledgeable", but to develop practical, and concrete ideas and values which will facilitate present and future adjustment to the everyday world. The third factor, E3, Maturation, describes a college which undertakes the function of developing self-direction in their students. Environmental presses emphasize independent and logical reasoning in order to develop internal motivation and direction toward practical ends. The last dimension, E4, Humanism, describes a student body interested in disucssing, sharing and debating ideas and theories of philosophy, politics, music, theology, etc. outside of the classroom. Although this connotes an intellectual cohesiveness among students with respect to intellectual activities, primarily in the social sciences, humanities, and arts, frequent interpersonal relations among students with respect to social activities,(parties, sports events, etc.) do not exist.

# Chapter IV

## Criterion Measures

In this chapter the criterion measures used in the final analyses are described. As indicated in earlier chapters, these measures are of two general types. The first, computed from information provided on the preliminary and final survey instruments completed by appropriate personnel at each college, describes the "output" of the college. In general, these measures describe what the college is doing with its students and what happens to the students. The second variety of criterion measures are attitude items which permit the students to describe the extent to which they are satisfied with the college, feel that they are achieving or making progress toward rather general educational goals, and the extent to which participation in various types of activities is present.

Output Measures

The first set of criterion measures are those that might be generally classified as output measures. Their exact definition and rational for including them follows below.

O1 = AA Index = number of students who completed the Associate of Arts degree in the 1964-1965 academic year ÷ the number of students enrolled in transfer programs in the fall of 1964

O2 = TR Index = number of students who transferred to senior institutions during the 1964-1965 academic year ÷ the number of students enrolled in transfer programs in the fall of 1964

O3 = OP Index = number of students who completed occupational (technical and vocational) programs during the 1964-1965 academic year ÷ the number of students enrolled in occupational programs in the fall of 1964

O4 = EMP Index = number of students employed during 1964-1965 in jobs relevant to occupational training they had received at the college ÷ number of students enrolled in occupational programs in the fall of 1964

O5 = Ba Index = percent of students who transfer that earn the bachelors degree

These five indices describe what happens to students who are enrolled in the college. These can probably be called, most appropriately, output measures, since they describe, in relative terms, the extent to which the colleges return "processed commodities" to the larger community. These are, however, only indices. For example, of those students who entered the college for the first time as freshmen in the fall of 1963, how many of them completed Associate of Arts degrees at the end of the 1964-1965 academic year (assuming a normal two-year program)? Most colleges could not provide this information on a current basis. Also, the assumption of a "normal" two-year programs is invalid, since students generally proceed at their own rate. Many students are employed part-time or have other responsibilities which prohibit their completing "normal" two-year programs in the alloted time. Also, those planning to transfer may do this at any time they choose and meet the requirements of the institution to which they transfer. Many technical and vocational programs, especially vocational programs, are not exactly two years in length. Nursing programs normally take longer or involve intensive summer study. Many vocational programs are of one year or less in length. The employment of students who have had technical or vocational training is even more sporadic since they may leave a program and take employment as it is offered to them or as it becomes available. The problem of matching bachelors degree students with a particular incoming group of freshmen students in a junior college is highly improbable without extensive research endeavors.

Therefore, the above indices were selected. It is assumed that any sources of systematic error, such as rapid enrollment decreases or increases, the recent addition or deletion of programs, etc., are randomly distributed due to the sample selection procedures. The first four indices are computed from items in the final survey instrument (numerators) and the preliminary survey instrument (denominators). The fifth index was supplied directly by the colleges on the preliminary survey form. This is admittedly, in many of the colleges, based upon relatively insecure evidence since it is often difficult to discover what happens to students after they have been away from the college for a number of years. Experience with many junior colleges has indicated that these estimates do not change very rapidly and that when estimates by college personnel are validated by extensive follow-up studies, they tend to be relatively accurate. Again, the time-lag factor prohibits the establishment of any "input-output" relationship since some students may complete a degree two years after transferring whereas other students may complete a degree 5 or 6 years after transferring, and after attending several senior institutions. In general, especially with public junior colleges, most students transfer to nearby public senior institutions, which assists junior college personnel in getting rather frequent and accurate feed-back on the performance of their transferring students. Many senior public institutions automatically provide junior colleges from which they receive numbers of transfer students such information.

O6 = PR Index = number of students placed on academic probation during the 1964-1965 academic year ÷ the number of students enrolled in the fall of 1964

O7 = DI Index = number of studenss dismissed from the college or refused admission for academic reasons ÷ the enrollment in the fall of 1964

These two indices give an internal picture of the "rejection rate" the college encounters while processing its raw material. They indicate what proportion of the production units are rejects. These indices are less subject to the problems and any possible systematic error sources encountered with the first five indices, since the numerator and denominator are related to the same time period (the 1964-1965 academic year). These indices would be influenced, however, by the nature of the programs available at the college, the "standards" operationally defined in terms of dismissal and probation policies, grading practices, admission and placement procedures, etc., and the nature of the students coming into the college (the quality of the raw material).

08 TR Percent = enrollment in transfer programs in the fall of 1964 ÷ the total college enrollment in the fall of 1964

09 OP Percent = enrollment in occupational programs ÷ the total enrollment in the fall of 1964

These measures describe the two major types of "student processing" that occur in public junior colleges. They would be influenced by the nature of programs available, and other factors, but in general can be said to describe the relative amount of emphasis placed upon these two program areas. Again, the problems and possible systematic error sources are not as troublesome since the numerators and denominators pertain to the same academic year time period (1964-1965).

Several problems arise if one trys to develop measures that describe what colleges are achieving, what they produce in terms of output, etc. The problems are even more complicated if one is concerned with how this achievement and output relates to the achievement and output that a particular college should be exhibiting, both in kind and amount. For example, consider two hypothetical colleges of the same size, e.g. 1,000 students, in the same type of community. Suppose that college A has half of its students (500) enrolled in technical and vocational programs and college B has only 100 students, 10%, of its students enrolled in technical and vocational programs. If both of the colleges, however, have only 50 students that complete technical and vocational programs, which one is serving its community(the same community) best? Further, suppose that in college A 300 of its students, 30%, are placed on probation and in college B only 100, 10%, of its students are placed on probation. How does this further information affect the evaluation? Further, suppose that 200 students in college A achieve employment in technical and vocational areas for which they received training whereas in college B none of the students obtain such employment What then does this do to the evaluation?

The basic problem of trying to select, in general, appropriate criterion measures is probably insolvable. By the selection of several types of criterion measures, the problem can probably be contained, even though it cannot be solved. Therefore, the first five output indices can be considered as describing the quality of the job done by the college for a particular group of students, e.g. the OP, EMP, and AA Indices. Other measures describe the attrition or "waste" resulting from the process, e.g. PR and DI Indices. Other measures describe the scope of the two major types of processes, e.g. TR Percent and OP Percent.

Ultimately, for evaluation and decisions at a particular college, a composite criterion would have to be developed for each college, indicating the relative emphasis upon these various measures or other similar measures. Since this is beyond the scope of this study, only relationships between these variables and other variables, (see Chapters II and III) will be estimated.

## Satisfaction, Achievement and Activities

The second major set of criterion measures are mean ratings by students on a number of items in the Junior College Environment Scales questionnaire. These items were also included in the Student Preference Scales. Since it appeared desirable to consider only the responses of students who had had some time to become familiar with the college, develop attitudes, satisfaction and dissatisfaction, and be capable of expressing their judged achievement of certain general educational goals, the responses were used from the JCES. This instrument was completed only by students who had spent at least one quarter or semester in the college. The SPS was completed, in several colleges, by random samples of students. Since freshmen classes are typically larger than sophomore classes, and since most of these instruments were administered during the fall of 1965, many of the students completing the SPS in some colleges were first semester or first quarter students.

Three of these items allowed the students to express their general satisfaction with the college. They were rated by students on a five point scale where 1 represented the most satisfaction and 5 represented the least satisfaction. These items, JCES items 309, 311, and 312 (see Appendix I) are reproduced below for convenience with their new code number which will be used in later chapters.

A1 - How much of the time do you feel satisfied with your college?
1 -- nearly all the time
2 -- much of the time
3 -- about half the time
4 -- occasionally
5 -- rarely

A2 - How much do you like your college?
1 -- like it extremely well
2 -- like it more than dislike it
3 -- neither like nor dislike it
4 -- dislike it more than like it
5 -- dislike it extremely

A3 - To what extent have you found groups in the college which were really congenial and with which you felt happy?
1 -- very much
2 -- quite a bit
3 -- somewhat
4 -- not very much
5 -- not at all

Students were also asked to indicate their judgments as to the amount of progress they felt they were making toward a number of generally stated and accepted educational goals. Again, a five point scale was used with 1 representing the most amount of progress and 5 representing no progress. These 16 items are items 329-344 in the JCES (see Appendix I). For convenience they are reproduced below with their code numbers as used in later chapters.

A4 - Gaining experience and skill in getting things done promptly and properly.

A5 - Developing abilities to communicate and work effectively with groups and individuals.

A6 - Developing the ability to write, speak, and communicate clearly, correctly, and effectively.

A7 - Vocational training -- skills and techniques directly applicable to a job.

A8 - Adjusting to the behavior expected in your college and social groups.

A9 - Knowing the accepted rules and customs of the social groups and organizations to which you belong.

A10- Learning to get along well with others even though they may think and act differently from you.

A11- Developing an ability to think critically.

A12- Background for further education in some professional, scientific, or scholarly field.

A13- Developing an understanding and appreciation of the concepts, attitudes, and methodology of science.

A14- Ability to define and solve problems in a rational and systematic manner.

A15- Knowledge of and facility in applying principles of modern technology.

A16- Developing an interest in reading and learning beyond the requirements of college classes.

A17- Acquiring an appreciation of ideas and their usefulness.

A18- Understanding major issues and problems that confront modern society in America and around the world.

A19- Developing an appreciation and enjoyment of art, music, and literature.

In a final group of 16 items the students were asked to indicate how much they participated in a number of activities often found in colleges. Again, a rating of 1 indicated "very much" participation and a rating of 5 indicated no participation. These items, 313-328 in the JCES (see Appendix I), are listed below with their code numbers.

A20 - Intercollegiate and varsity sports as a participant.

A21 - Intramural sports as a participant.

A22 - Attending sports events as a spectator.

A23 - Publications: college paper, yearbook, etc.

A24 - Music organizations: chorus, band, etc.

A25 - Dramatics.

A26 - Student government.

A27 - Religious groups.

A28 - Academic clubs, honoraries.

A29 - Social groups: fraternities, etc.

A30 - Hobby groups.

A31 - Attending musical or dramatics events: school concerts, plays, etc.

A32 - Debating groups.

A33 - Service groups.

A34 - Visiting art exhibits, art galleries, museums, etc.

A35 - Attending lectures by guest speakers.

These items dealing with satisfaction, judged achievement, and reported participation in various activities, would be expected to be related more strongly to the environmental measures obtained from the JCES than the external determinant measures described in Chapter II (community variables, student p ferences, and faculty perferences). Several of these items were either taken directly or derived from items used by Pace in an earlier study (1964). Others were developed through this writers experience with junior colleges and through suggestions by others familiar with public junior colleges. Most of these appear as items describing goals of education dealing especially with occupational areas, which are of more importance in public junior colleges than senior colleges and universities.

These items, or subsets of them could have been subjected to various types of analyses to develop scales, identify related items, clusters of items, etc. It was decided, however, to examine these as sep rate variables and let the "clustering" or data reduction occur in the final analyses. Descriptive statistics for all of the criterion measures may be found in Tables V-1 and V-2 in the next chapter. Table V-1 contains means and standard deviations for all of the variables used in the final analyses and table V-2 reports intercorrelations among these variables. The criterion measures are identified, as in this chapter, by code letters beginning with O and A.

## Summary

In this chapter the criterion measures used in the final analyses are described. These measures are of two types. The first describes the "output" of the college and the second, the attitudes of the students.

The "output" measures describe the extent to which the college return "processed commodities" to the larger community, that is, what the college is doing with its students and what happens to them. Since a number of variables must be taken into account in order to obtain a valid evaluation of the achievement of junior colleges, a number of output indices were used. The first five output indices directly describe the quality of the job done by the colleges for particular groups of students such as A.A. degree attainment and the extent to which students complete occupational programs. Other measures describe the attrition resulting from the educational process, e.g., number of students placed on academic probation and rate of dismissals and of rejected readmission requests. A final set of indices describe the two major types of "student processing" that occur in the public junior college, e.g. percentage of enrollment in occupational programs and percentage of enrollment in transfer programs.

The second variety of criterion measures, which describe the attitudes of the students towards the college environment, consists of two sets of items. The first set are indices of the extent to which students are satisfied with the college and express judgements as to the amount of progress they felt they were making toward a number of generally accepted educational goals. Another set measured the extent to which students participated in various types of campus activities.

## Chapter V

## Relationships Among Variables-
## Analyses and Discussion of Results

In previous chapters the various sets of variables of concern in the study were described along with any analyses necessary in finalizing the selected measures. In Chapter II, the external determinants were described. These consisted of 13 measures characterizing communities in which the junior colleges were located (Factors C1 - C13), two scales indicating the dimensions along which student preferences for junior colleges differed (Scales S1 and S2), and two scales along which faculty preferences for junior colleges were defined (Scales F1 and F2). This practice of identifying variables by letters which indicate "sets" to which they belong (C for community, S for student, and F for faculty)with arabic numerals to indicate specific variables within the set, and abbreviated titles or item descriptions, will be continued throughout the rest of this report for convenience and to conserve space. In Chapter III the major dimensions characterizing junior college environments were described (Scales E1 - E4). In Chapter IV the criterion measures to be used are described and discussed. These consist of two sets of variables. The output measures are identified as variables O1 - O9. Since the items reporting satisfaction, achievement, and participation in activities are all attitudional in nature, the letter A was selected to represent these variables, A1 - A35.

Table V-1 reports the mean and standard deviation for each of the variables. In those situations where the original analysis did not use the colleges as the basic unit of analysis (student preferences, faculty preferences, the attitude items) the mean score for a college on a scale or item was computed and is the basis of statistics reported in this chapter. The reader will remember that since the student and faculty preference scales were actually measuring differences among individual people much in the same way as a personality inventory, all of the preliminary analyses and items analyses to identify the dimensions were undertaken using individual persons as the basic unit of analysis. For the attitude items, since no preliminary analyses were undertaken, mean ratings were computed on each separate item. Table V-2 reports the intercorrelation matrix for all 65 of these final analysis variables.

### Canonical Analysis

For convenience and because of logical and quantative differences the battery of criterion measures was divided into three separate groups for the canonical analyses. The first groups consisted of the nine output measures. The second group was comprised of the nineteen items, A1 through A19, in which the students rated their satisfaction with the college and judged achievement of a variety of educational objectives. The final group consisted of the sixteen items, A20 through A35, in which the students indicated the extent to which they participated in various activities. Thus the entire battery of 65 variables was divided into 5 groups (external determinants, environmental measures, and the three groups of criterion measures). The canonical analysis program developed by Cooley and Lohnes (1962) was used to perform these analyses.

### Table V-1

### Mean and Standard Deviation of 65 Variables for 100 Public Junior Colleges

| Variable | Mean | Standard Deviation |
|---|---|---|
| 1 - C1 - Class | 62.06 | 32.77 |
| 2 - C2 - Higher Education | 7.64 | 2.72 |
| 3 - C3 - Mobility | -6.44 | 5.23 |
| 4 - C4 - Marital Status | 47.24 | 7.18 |
| 5 - C5 - Economics, Racial Discrimination | -.85 | 17.23 |
| 6 - C6 - Industrial Unionization | 397.99 | 271.10 |
| 7 - C7 - Imbalance in Housing | -12.15 | 21.45 |
| 8 - C8 - Young Families | -43.92 | 18.95 |
| 9 - C9 - Suburban Areas | 4897.43 | 3100.09 |
| 10 - C10 - Large Farms | -151.74 | 480.36 |
| 11 - C11 - Consumption | 1929.88 | 393.83 |
| 12 - C12 - Income | 19.44 | 30.47 |
| 13 - C13 - Urbanization | 11.42 | 244.37 |
| 14 - F1 - Students | 79.78 | 2.30 |
| 15 - F2 - Liberal Arts | 53.75 | 3.66 |
| 16 - S1 - Scholarship and Intellectual Environment | 90.59 | 6.95 |
| 17 - S2 - Sociability | 95.70 | 3.33 |
| 18 - E1 - Conventional Conformity | 54.11 | 11.63 |
| 19 - E2 - Internalization | 24.87 | 6.43 |
| 20 - E3 - Maturation | 45.22 | 6.09 |
| 21 - E4 - Humanism | 14.20 | 4.92 |
| 22 - 01 - AA Index | 26.61 | 98.17 |
| 23 - 02 - TR Index | 30.21 | 57.62 |
| 24 - 03 - OP Index | 23.54 | 50.47 |
| 25 - 04 - EMP Index | 19.15 | 38.02 |
| 26 - 05 - BA Index | 70.28 | 20.28 |
| 27 - 06 - PR Index | 12.85 | 8.98 |
| 28 - 07 - DI Index | 5.08 | 4.18 |
| 29 - 08 - TR Percent | 60.61 | 28.41 |
| 30 - 09 - OP Percent | 21.03 | 17.76 |
| 31 - A1 - Feel Satisfied | 2.36 | .27 |
| 32 - A2 - Like College | 2.12 | .25 |
| 33 - A3 - Found Congenial groups | 2.52 | .27 |
| 34 - A4 - Getting things done | 2.05 | .15 |
| 35 - A5 - Work with groups and individuals | 2.13 | .17 |
| 36 - A6 - Write, speak and communicate | 2.11 | .14 |
| 37 - A7 - Vocational training | 2.6 | .34 |
| 38 - A8 - Adjusting to expected behavior | 2.13 | .20 |
| 39 - A9 - Knowing accepted rules and customs | 2.21 | .25 |
| 40 - A10 - Get along with others | 1.91 | .15 |

Table V-1 Continued

| Variable | Mean | Standard Deviation |
|---|---|---|
| 41 - A11 - Think critically | 2.07 | .14 |
| 42 - A12 - Background for further education | 2.14 | .14 |
| 43 - A13 - Appreciation of science | 2.75 | .19 |
| 44 - A14 - Define and solve the problems | 2.37 | .20 |
| 45 - A15 - Modern technology | 2.84 | .14 |
| 46 - A16 - Interest in reading and learning | 2.46 | .23 |
| 47 - A17 - Appreciation of ideas | 2.22 | .19 |
| 48 - A18 - Understanding issues and problems | 2.33 | .16 |
| 49 - A19 - Appreciation of art, music and literature | 2.57 | .30 |
| 50 - A20 - Varisity sports | 4.13 | .30 |
| 51 - A21 - Intramural sports | 3.94 | .38 |
| 52 - A22 - Sports spectator | 2.97 | .48 |
| 53 - A23 - Publications | 4.32 | .22 |
| 54 - A24 - Music Organizations | 4.31 | .24 |
| 55 - A25 - Dramatics | 4.49 | .20 |
| 56 - A26 - Student government | 4.25 | .22 |
| 57 - A27 - Religous groups | 4.01 | .35 |
| 58 - A28 - Academic clubs | 4.28 | .26 |
| 59 - A29 - Social groups | 4.09 | .28 |
| 60 - A30 - Hobby groups | 4.31 | .20 |
| 61 - A31 - Attending plays and concerts | 3.22 | .40 |
| 62 - A32 - Debating groups | 4.49 | .20 |
| 63 - A33 - Service groups | 4.18 | .24 |
| 64 - A34 - Visiting art gallaries and museums | 3.89 | .32 |
| 65 - A35 - Attending lectures | 3.21 | .40 |

## Table V-2

## Correlation Matrix of 65 Variables for 100 Public Junior Colleges - Upper Diagonal

Row 1 (C1) 1.000 .463 -.260 .028 -.286 .559 .110 .227 .428 -.282
.746 .885 .237 -.037 .054 .138 .181 -.417 .044 -.115 .228 .072
.014 .142 .117 .008 .197 .149 -.152 .080 .068 .073 .267 .047
.102 -.010 .025 .335 .177 .125 -.237 -.157 -.014 -.018 .003
-.135 -.061 .067 .020 .193 .219 .286 .210 .075 .063 .131 .359
.344 -.044 .169 .057 .131 .225 -.007 -.069

Row 2 (C2) 1.000 -.204 -.082 .058 .505 .165 .294 .207 -.041 .346
.404 -.016 -.085 -.060 .054 .059 -.072 .234 -.065 .170 .047
-.181 .059 .229 .027 .065 .072 -.043 -.046 -.002 -.057 .048
.129 .068 -.141 .035 .066 -.034 .019 -.146 -.152 -.037 -.040
.002 -.037 .044 .043 -.201 .110 .082 .002 .046 -.112 -.131
.026 -.053 .003 -.014 -.067 -.244 -.067 .025 -.221 -.189

Row 3 (C3) 1.000 -.107 .231 -.044 -.045 -.259 .166 -.081 .035
-.117 .367 .128 -.075 .099 .023 -.179 .055 -.126 .010 .037
.002 -.132 -.045 -.174 .070 .103 -.109 .223 .180 .155 .317
-.046 .090 .012 .009 .140 .140 .019 -.033 .227 .145 .133 .132
-.021 -.019 -.015 -.025 .050 .091 .178 -.096 -.136 .065 .031
.040 -.057 .116 -.119 .025 -.018 -.015 -.174 -.033

Row 4 (C4) 1.000 -.016 -.128 -.234 -.397 -.108 .163 -.031 -.001
-.157 .036 -.008 -.062 .107 -.052 -.009 .022 .012 -.005 .057
.016 .038 .073 .037 -.121 -.009 -.165 -.050 -.074 -.132 -.151
-.093 -.001 -.144 .019 -.037 -.079 -.099 -.157 -.047 -.296
-.172 -.032 -.188 -.099 .111 -.047 .027 -.063 .141 .100 -.006
.801 .135 -.077 .168 -.073 .030 .106 .167 .040 .003

Row 5 (C5) 1.000 -.071 .148 .025 .010 -.000 -.149 -.255 .129
-.057 -.150 -.098 -.043 .079 .194 .083 .031 -.109 .005 .084
.032 .157 -.064 .039 .134 -.043 .114 .176 .096 .048 -.017
.012 .213 -.081 -.090 -.220 .094 -.056 -.096 .053 .140 -.118
-.080 -.247 -.233 -.053 -.085 -.075 -.121 -.094 -.061 .172 -.206
-.144 .143 .057 -.133 .069 -.030 -.154 -.035

Row 6 (C6) 1.000 .143 .292 .615 -.277 .706 .647 .360 .029 -.102
.074 .291 -.418 .257 -.027 .352 .083 -.102 -.022 -.009 -.017
.191 .230 -.195 .106 .006 -.022 .310 .045 .092 -.008 .114 .2[illegible]
.084 .038 -.275 -.109 -.047 -.117 .138 -.090 -.267 -.024 -.257
.269 .242 .284 .134 .073 .113 .226 .382 .290 .006 .222 -.100
.158 .158 -.291 -.124

Row 7 (C7) 1.000 .638 .167 -.113 .085 .246 .094 -.078 -.032 .109
.105 -.172 .227 -.057 .130 -.065 -.215 .027 .022 -.184 -.105
-.140 -.152 -.021 .240 .148 .127 .157 .175 .155 .262 .231 .199
.207 .036 -.104 .020 .121 .070 .014 .166 -.063 -.028 -.089
.066 .056 .035 -.021 -.003 -.115 .057 .025 .017 -.025 .078
-.153 -.109 -.229 .087

Table V-2 Continued

Row 8 (C8) 1.000 .247 -.159 .180 .312 .055 -.186 .040 .118 .010
-.062 .123 -.036 .148 .021 -.154 .121 .123 -.021 -.030 -.010
-.085 .060 .130 .102 .118 .223 .127 .146 .105 .146 .125 .197
.083 -.012 -.025 .115 .009 -.002 .118 .087 .007 -.001 .001
.143 -.005 .076 .025 .085 .010 .089 -.193 -.055 .041 -.132
-.085 -.210 .045

Row 9 (C9) 1.000 -.304 .812 .593 .846 .003 -.056 .079 .177 -.423
.307 -.072 .475 -.055 -.103 .021 -.062 -.140 .216 .267 -.189
.102 .129 .083 .499 .126 .086 -.032 .153 .378 .283 .157 -.213
-.052 -.233 -.255 .086 -.255 -.319 -.234 -.305 .133 .240 .378
.026 .064 .064 .108 .415 .070 -.098 .071 .138 .008 .068 -.460
-.008

Row 10 (C10) 1.000 -.412 -.369 -.308 .013 .065 .148 -.319 .276
.052 -.096 -.275 -.019 -.002 .059 .159 .076 -.042 -.152 .134
-.015 -.158 -.064 -.128 -.131 -.063 .095 -.159 -.162 -.084 .059
.123 .037 .136 .007 -.093 .141 .035 .023 .079 -.206 -.058
-.394 -.086 -.222 -.204 -.095 -.302 -.187 .065 -.238 -.169
-.140 -.038 .072 .034

Row 11 (C11) 1.000 .842 .583 .042 -.103 .085 .223 -.512 .159
-.128 .395 -.018 -.070 .055 .019 -.068 .288 .326 -.193 .067
.136 .103 .449 .173 .142 .000 .122 .441 .293 .174 -.244 -.089
-.134 -.133 .118 -.172 -.174 -.036 -.152 .220 .238 .400 .180
.070 .119 .205 .504 .289 -.015 .173 .116 .149 .240 -.249 -.049

Row 12 (C12) 1.000 .373 -.019 -.007 .172 .218 -.483 .166 -.090
.287 .026 -.038 .084 .050 -.123 .219 .185 -.240 .122 .082
.081 .336 .143 .165 .072 .060 .365 .256 .222 -.167 -.048 -.037
-.000 .075 -.047 -.006 .089 .002 .183 .267 .325 .244 .084 .134
.151 .436 .353 .006 .188 .120 .135 .197 -.125 -.028

Row 13 (C13) 1.000 .018 .056 .070 .087 -.325 .191 -.074 .326
-.031 -.022 .037 -.097 -.164 .098 .151 -.085 .121 .176 .139
.456 .072 .069 -.027 .151 .309 .237 .096 -.105 .004 -.159
-.180 .050 -.181 -.237 -.188 -.195 .070 .162 .331 .005 .023
.057 .077 .268 -.022 -.072 .087 .205 .042 .086 -.302 .099

Row 14 (F1) 1.000 -.545 -.160 .171 .100 .051 .053 .023 -.046
.065 .030 -.057 -.120 .175 .070 .140 -.007 -.043 -.075 -.149
-.165 -.001 .057 .048 -.118 -.168 -.120 -.025 -.003 .111 .072
.205 .012 -.031 -.021 -.027 -.011 .091 -.078 -.030 -.027 -.018
.122 -.150 .143 .084 .167 -.064 .176 .058 .037 .119

Row 15 (F2) 1.000 .115 .031 -.021 -.296 .025 -.113 .016 .035
.036 .059 .016 -.074 -.055 -.069 .055 -.035 .074 .036 -.045
-.111 -.000 -.083 -.003 .043 -.014 -.046 -.061 .095 -.071 -.259
.043 .047 .071 -.287 .087 .057 .015 .174 .121 .171 -.145 .112
.097 .047 .059 .242 .024 .033 .227 .148

Table V-2 Continued

Row 16 (S1) 1.000 -.235 -.222 -.075 -.369 -.110 -.069 -.237 .159
.268 -.146 -.136 .042 .021 .047 .240 .266 .345 .287 .247 .162
-.001 .343 .272 .253 .153 .139 .059 .123 .128 .138 .175 .068
.089 -.270 -.038 -.052 -.104 -.173 -.104 -.003 -.038 -.027 .053
-.205 .078 -.207 .122 -.024 .024

Row 17 (S2) 1.000 -.446 .082 .115 .369 -.124 .057 -.046 -.265
.027 .116 .204 -.052 .082 .078 -.002 .218 .117 .170 .017 .376
.189 .176 .023 -.086 -.213 .057 -.060 .236 -.129 -.200 -.199
-.146 .532 .501 .340 .465 .325 .359 .251 .435 .352 .255 .379
.127 .335 .192 -.138 .198

Row 18 (E1) 1.000 .056 .490 -.308 .046 .073 .029 .084 .078 -.057
-.099 .244 -.165 -.534 -.475 -.740 -.450 -.385 -.169 -.277 -.635
-.539 -.290 .131 -.051 -.031 -.012 -.297 .051 .043 .017 .042
-.393 -.443 -.547 -.319 -.208 -.262 -.290 -.622 -.312 -.184 -.268
-.198 -.160 -.357 .198 -.045

Row 19 (E2) 1.000 .332 .386 -.238 -.201 -.064 -.109 -.132 -.048
.041 .100 -.093 -.358 -.448 -.038 -.164 -.086 -.167 .138 -.076
-.024 -.033 -.132 -.253 -.295 -.203 .079 -.342 -.363 -.450
-.563 -.033 .069 -.058 -.057 -.117 -.148 .103 .020 -.124 .062
-.099 -.215 -.099 -.133 -.570 -.347

Row 20 (E3) 1.000 .365 -.184 .041 -.044 -.182 .086 .003 -.046
.149 -.248 -.721 -.693 -.454 -.367 -.199 -.386 .204 -.331 -.185
-.174 -.167 -.384 -.230 -.200 .023 -.382 -.362 -.287 -.314 .168
.135 -.002 -.004 .006 .018 -.021 -.074 .099 .221 .136 -.034
.092 -.143 -.092 .030

Row 21 (E4) 1.000 -.249 -.182 -.003 -.133 -.017 .095 .026 .025
-.083 -.209 -.339 .249 .228 .268 -.069 .430 .404 .359 .241
-.125 -.255 -.365 -.194 .274 -.457 -.388 -.357 -.456 .352 .427
.570 .036 .079 .014 .090 .323 .086 .206 .156 .125 -.068 .129
-.512 -.060

Row 22 (01) 1.000 .312 -.021 .281 .114 .041 .096 -.322 .220 .095
.119 -.043 -.214 -.115 .062 -.483 -.051 -.208 -.028 .014 .331
.216 .012 -.262 .209 .117 .259 .217 .037 -.044 .023 .079 .127
.097 -.012 .035 .008 -.263 .048 -.030 .070 -.018 .180 -.055

Row 23 (02) 1.000 .093 .081 .161 .059 .054 -.280 .028 -.067 .037
-.124 -.099 -.079 .020 -.152 -.116 -.129 -.092 .111 .130 .088
-.007 -.163 .097 .099 .110 .179 .020 -.000 -.111 .145 .123
.112 .172 -.015 .032 .012 .078 -.030 .110 -.029 .195 .138

Row 24 (03) 1.000 .629 .123 -.144 -.012 .109 -.186 .051 .116
.075 .179 .195 .106 .002 .160 .114 .142 .159 -.056 .005 .048
-.077 .098 .098 .097 .150 -.160 -.016 -.016 .023 .000 -.006
.084 -.006 .010 .004 -.184 .053 .030 .121 .119 .114

### Table V-2 Continued

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Row 25 (04)   1.000   .083   -.010   .010  -.088  -.166   .032   .094  -.013   .084
.072   .094   -.185   .177   .018   .137   .100   .053  .124   .057   -.182   .146
.140   .217   .184  -.235   -.200   -.161   -.039   -.088   -.048   -.035   -.109
-.052   -.116   -.299   -.039   -.103   -.036   .070   -.036

Row 26 (05)   1.000   -.048   -.050   -.001   -.046   -.058   -.006   -.035   -.048
-.124   -.096   -.101   .006   -.052   -.152   -.034   .066   .130   .008   .003
.041   -.016   .006   .105   .121   -.049   .015   .049   .177   .165   .096   .008
.164   .061   .073   -.075   .072   .002   .155   -.046

Row 27 (06)   1.000   .375   -.060   .050   .010   .112   .095   .046   .089   .017
.055  .074   .019   -.025   -.071   .077   .018   .083   .194   -.041  .036   .047
.007   .072   .145   .083   -.019   .015   .081   .008   .032   .111   .017   .133
-.029   .045   -.014   .047   -.008

Row 28 (07)   1.000  -.108   -.005   .184   .183   .277   .105   .099   .057   .060
.151   .043   -.053   -.111   .020   .067   -.047   .056   -.085   -.113   -.086
-.077   .097   .029   .124   .033   .173   .053   .198   .090   .161   -.166   .012
.019   .167   .063   -.108   .034

Row 29 (08)   1.000   -.201   -.201   -.078   -.116   -.024   .120   .075   .054
.265   -.001   .072   .033   .093   -.143   .096   .137   .207   -.109   .039
-.157  -.019   -.101   .081   -.053   -.036   -.139   -.004   .137   -.210   .101
.284   .068   .091   .076   .169   .043   .159

Row 30 (09)   1.000   .168   .174   .172   -.035   -.001   .166   -.144   .030
.025   .083   .025   .232   .042   .071   -.041   .074   .021   .181   .134   .005
.036   .169   .010   .133   .069   -.051   .102   .017   -.092   -.040   .177
-.103   -.087   .026   .048

Row 31 (A1)   1.000   .879   .572   .452   .291   .279   .086   .449   .308   .153
.096   .263   .224   .114   .089   .196   .283   .116   .213   -.015   .070   .157
.063   .067   .071   .151   .131   .061   -.090   -.005   .173   .007   .141   .024
.112

Row 32 (A2)   1.000   .587   .410   .229   .331   .008   .357   .249   .108   .115
.278   .215   .130   .037   .276   .313   .201   .303  -.026   .023   .063   .054
.042   .113   .166   .041   .026   -.080   .018   .146   .056   .126   .143   .128

Row 33 (A3)   1.000   .494   .395   .218   .226   .633   .601   .342   .018   .149
.046   -.007   .199   -.009   .018   -.024   .028   .207   .365   .470   .138  .117
.223   .319   .414   .255   .131   .062   .362   .078   .348   -.213   .160

Row 34 (A4)  1.000   .640   .403   .408   .634   .576   .555   .350   .272   .096
.308   .406   .218   .393   .200   .113   .094   .192   .358   .053   .094   .072
.175   .171   .078   .088   .041   .213   -.070   .264   -.067   .199

Row 35 (A5)   1.000   .411   .445   .622   .572   .598   .408   .341   .114   .442
.517   .260   .338   .330   .089   .070   .261   .332   .070   .029  .113   .125
.202   .166   .152   .023   .227   -.065   .310   .045   .304
```

## Table V-2 Continued

Row 36 (A6) 1.000 -.025 .362 .301 .421 .446 .431 .198 .332
-.009 .491 .391 .342 .500 -.110 -.011 .162 .028 .209 .172
.123 .028 .120 .006 -.012 .264 .091 .227 .160 .229

Row 37 (A7) 1.000 .366 .486 .241 .023 -.220 -.034 .092 .602 -.315
-.123 -.342 -.358 .227 .370 .249 .074 -.014 .001 .164 .189
.214 .379 .207 .038 .043 .185 -.263 .153

Row 38 (A8) 1.000 .814 .646 .079 .096 .096 .145 .289 -.024 .132
.123 .096 .083 .309 .552 .087 .094 .107 .124 .400 .233 .136
.041 .347 -.069 .393 -.166 .170

Row 39 (A9) 1.000 .610 .118 .111 .104 .123 .330 -.064 .179 .102
.142 .089 .369 .537 .150 .146 .204 .138 .404 .274 .317 .062
.470 -.024 .399 -.117 .249

Row 40 (A10) 1.000 .342 .259 .090 .307 .181 .143 .278 .268 .177
-.068 .212 .324 -.037 -.014 .018 -.105 .204 .053 .031 -.153
.279 -.281 .120 -.098 .248

Row 41 (A11) 1.000 .516 .215 .514 .178 .490 .468 .287 .301 -.134
-.072 -.072 -.066 -.025 -.038 -.018 -.184 -.067 .037 -.074 .111
-.074 .061 .235 .274

Row 42 (A12) 1.000 .378 .491 .149 .541 .516 .451 .346 -.067 -.014
.041 -.095 .058 .106 .049 .006 .037 -.087 .013 .019 -.073 .081
.228 .051

Row 43 (A13) 1.000 .394 .249 .428 .487 .313 .523 .051 .047 -.008
.265 .214 .304 .201 .087 .359 .082 .246 .139 .198 .171 .452
.250

Row 44 (A14) 1.000 .476 .422 .522 .426 .253 -.051 .019 .027
.005 -.068 .014 -.050 -.134 .145 .088 .153 -.028 -.000 .038
.244 .165

Row 45 (A15) 1.000 .046 .147 -.047 -.242 .244 .317 .269 .070
.029 .105 .236 .153 .270 .341 .459 -.009 .146 .286 -.023 .113

Row 46 (A16) 1.000 .717 .604 .589 -.141 -.177 -.177 .060 .057 .168
.032 -.107 .065 -.022 .026 .136 .107 .094 .497 .259

Row 45 (A17) 1.000 .608 .629 -.212 -.129 -.068 .049 -.052 .118
-.048 -.108 .096 .042 .054 .249 -.064 .086 .469 .291

Row 48 (A18) 1.000 .614 -.134 -.149 .017 .034 .026 .093 -.128
-.041 .105 -.145 -.039 .149 .045 .116 .485 .266

Row 49 (A19) 1.000 -.168 -.126 .019 .210 .323 .364 .037 .009
.249 .019 .009 .503 .172 .198 .694 .365

Table V-2 Continued

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Row 50 (A20) | 1.000 | .690 | .576 | .517 | .313 | .453 | .446 | .471 | .491 | .320 | .521 | .051 | .409 | .305 | -.058 | .045 |
| Row 51 (A21) | 1.000 | .522 | .403 | .121 | .306 | .376 | .467 | .435 | .468 | .392 | .186 | .251 | .325 | -.156 | .154 | |
| Row 52 (A22) | 1.000 | .260 | .428 | .406 | .290 | .370 | .425 | .222 | .311 | .478 | .222 | .393 | -.143 | .170 | | |
| Row 53 (A23) | 1.000 | .560 | .663 | .576 | .512 | .538 | .371 | .309 | .315 | .557 | .456 | .223 | .179 | | | |
| Row 54 (A24) | 1.000 | .697 | .422 | .390 | .440 | .110 | .348 | .444 | .471 | .306 | .228 | .175 | | | | |
| Row 55 (A25) | 1.000 | .552 | .506 | .579 | .338 | .484 | .503 | .574 | .391 | .329 | .263 | | | | | |
| Row 56 (A26) | 1.000 | .399 | .577 | .383 | .483 | .225 | .644 | .376 | .134 | .180 | | | | | | |
| Row | | | | | | | | | | | | | | | | |
| Row 57 (A27) | 1.000 | .527 | .271 | .375 | .368 | .294 | .400 | -.087 | .159 | | | | | | | |
| Row 58 (A28) | 1.000 | .398 | .521 | .338 | .582 | .517 | .214 | .243 | | | | | | | | |
| Row 59 (A29) | 1.000 | .366 | .224 | .283 | .443 | .088 | .183 | | | | | | | | | |
| Row 60 (A30) | 1.000 | .146 | .541 | .497 | .306 | .189 | | | | | | | | | | |
| Row 61 (A31) | 1.000 | .187 | .337 | .312 | .602 | | | | | | | | | | | |
| Row 62 (A32) | 1.000 | .536 | .309 | .173 | | | | | | | | | | | | |
| Row 63 (A33) | 1.000 | .308 | .252 | | | | | | | | | | | | | |
| Row 64 (A34) | 1.000 | .421 | | | | | | | | | | | | | | |
| Row 65 (A35) | 1.000 | | | | | | | | | | | | | | | |

Certain changes were required in order to run on the Control Data Corporation 6600 computer. Also, some of the basic routines in the Cooley and Lohnes program (matrix inversion, matrix diagonilization, etc.) were replaced by system routines developed by staff members of the Numerical Analysis Center, University of Minnesota.

Seven analyses were performed to estimate the relationships between external determinants and the criterion measures, external determinants and environment measures, and environment measures and the criterion measures. Only five of these analyses resulted in one or more statistically significant (using the one percent of confidence) canonical correlations. One of these analyses, reported in Table V-3, indicated that there were two statistically significant dimensions between the external determinants (community characteristics, faculty preferences, and student preferences) and the four Junior College Environment Scales. Another, reported in Table V-4, indicates that there are three statistically significant dimensions between the external determinants and measures of student satisfaction and achievement. Table V-5 indicates three canonical correlations relate external determinants and reported student participation in various activities. Three canonical correlations, reported in Table V-6, associate Junior College Environment Scales and measures of student satisifaction (variables A1 through A19). Another canonical analysis, summarized in Table V-7, indicates that there are three statistically significant dimensions between the Junior College Environment Scales and reported student participation in various activities. In the five tables, statistics are reported only for the significant vectors. The variable weights are standardized (varying from +1.0 through -1.0) and may be interpreted in much the same manner as variable loadings in a factor analysis or principal axis analysis.

The relationships between the external determinants and junior college environments offers evidence to support one of the major hypotheses of this study. Junior college environments, as perceived by students in the institutions, are related to characteristics of the communities in which they are located in at least two ways. If the first vector is described as a dichotomy, the loadings seem to indicate that colleges at one end of this dimension (the positive pole) would exhibit higher scores for Conventional Conformity, Scale E1, would have students that preferred a relatively higher degree of Sociability, Scale S2, faculty members that tend not to prefer social, frivolous, non-academically oriented students, Scale F1, and a community that is less suburban in nature, Factor C9. (It should be remembered that lower scores on the faculty and student preference scales are associated with desirability or preference.) Colleges that might exemplify the other end of this dimension (the negative pole) would exhibit less Conformity, less preference for Sociability by the students, a greater preference for more sociable students by the faculty members, and a more suburban type of community surrounding the college. The appearance of greater Conventional Conformity in the environment with a greater preference for Sociability by students reinforces the description of the Conventional Conformity dimension, Scale E1. In Chapter III, high scores on this dimension characterized an environment in which conformity and behavior controls were exercised by the "society" or through group pressures. That is, in order to socialize and participate in the student culture, individuals must conform to the behavior patterns and mores of the culture. The inverse nature of faculty preferences, Scale F1, is puzzling, but the weight of this variable is relatively less than the others. It appears, however, that in institutions where the students tend

Table V-3

Canonical Correlations and Variable Weights
Between External Determinants and
Junior College Environments

| | Vector 1 | Vector 2 |
|---|---|---|
| Correlation | .801 | .648 |
| Chi Square | 180.32 | 88.96 |
| Degrees of Freedom | 68 | 48 |
| External Determinants | | |
| C1 - Class | -.248 | .051 |
| C2 - Higher Education | .228 | -.521 |
| C3 - Mobility | -.203 | -.028 |
| C4 - Marital Status | -.035 | -.026 |
| C5 - Economics, Racial Discrimination | -.062 | -.064 |
| C6 - Industrial Unionization | -.241 | .227 |
| C7 - Imbalance in Housing | -.235 | -.133 |
| C8 - Young Families | .258 | -.046 |
| C9 - Suburban Areas | -.520 | -.871 |
| C10 - Large Farms | -.023 | -.283 |
| C11 - Consumption | .146 | .389 |
| C12 - Income | -.243 | .128 |
| C13 - Urbanization | .172 | .019 |
| F1 - Students | .397 | .075 |
| F2 - Liberal Arts | .275 | .534 |
| S1 - Scholarship and Intellectual Environment | -.138 | -.058 |
| S2 - Sociability | -.649 | -.173 |
| Environments | | |
| E1 - Conventional Conformity | .927 | -.486 |
| E2 - Internalization | -.251 | -.469 |
| E3 - Maturation | -.270 | .648 |
| E4 - Humanism | -.061 | -.353 |

to desire sociability, faculty members indicate that such students are relatively less desirable than in institutions where students express less interest in an active social environment. A possible explanation, among many that might be suggested, is that faculty members in an institution populated by students desiring a more sociable environment react rather negatively, as such student preferences usually conflict with the formal educational process. If this is true, the indicated faculty concern would not appear to be an "input" or "external determinant", but rather a reaction formed after the faculty members become part of the college organization. However, the correspondance of greater preference by faculty members for more sociable students, along with greater suburban characteristics in the community, the inversely less preference for more sociable students by faculty members in less suburban-like communities, invites further speculation. If it is true that suburbs with more individual family housing units, as opposed to central city areas with more multiple unit dwellings, are characterized by more sociable interactions among people (backyard barbecues, bridge clubs, etc.), as opposed to the city dweller who classically does not know the persons in neighboring apartments, it could be that faculty members are bringing into colleges a greater preference for an emphasis upon more sociable activities, that could be roughly classified as middle class in nature. Perhaps then, the students decreased interest in sociable activities, and an environment with less Conventional Conformity, is a reaction against the middle class values of the community in which they live. A large amount of literature, of a more popular nature, can be sighted to defend this speculation (student protests, participation in civil rights activities, etc.). Finally, one must suspect that colleges at either extreme of this dimension would probably be fraught with a greater number of problems and conflicts, especially between students and faculty, than colleges toward the middle of the continuum.

Considering the second dimension common to these two batteries of variables, colleges at one end (the negative pole) are characterized by greater Conventional Conformity (E1), Internalization (E2), greater preference for a liberal arts emphasis by faculty(F2), and communities again of a suburban nature (C9) with a larger number of people possessing higher education (C2). At the other end of the dimension (the positive pole) communities are less suburban in nature, fewer persons possess higher education, faculty members place less desirability upon liberal arts emphasis and the environment of the college is characterized by lower scores on Conventional Conformity and Internalization. The pattern exhibited by these five variables is quite logical and consistent with other research, primarily of a sociological nature, and common sense knowledge of communities and colleges. When the presence of Scale E3, Maturation, is observed, however, this dimension, as was true with the first vector, seems to imply conflict and stress. If it is assumed that Internalization and Maturation are desirable environments, it would appear that maximization of one is associated with lower scores on the other. In general, colleges and communities at the negative end of this dimension appear to place greater value and emphasis upon achievement and success, as defined by the society, but consequently less stress and emphasis upon student maturation, individuality, etc. Colleges and communities at the opposite end of the dimension (the positive pole) are apparently less concerned with achievement and success, this being associated with a lessened emphasis for Conventional Conformity, but greater emphasis toward individual growth, maturity, responsibility, etc. With this dimension it might be fruitful to speculate that the college environments are in fact determined in part by the community characteristics. Confidence in this type of casual relationship is more justified with the second vector than with the first.

The first canonical correlation in Table V-4, indicating a common dimension between the external determinants and measures of student satisfaction and achievement, is characterized by higher Class (C1), more suburban-like communities (C9), greater industrial unionization (C6), but lower income (C12) and a smaller proportion of the population with higher education (C2), at the positive end of the dimension. Associated with this is less success in finding congenial groups (A3), adjusting to expected behavior (A8), but more success in getting things done (A4). The negative end of the dimension is characterized by lower Class, fewer suburban characteristics, less Industrial Unionization, but greater Income and a larger proportion of the population having higher education. Associated with communities at this end of the dimension are found greater success in meeting congenial groups and adjusting to expected behavior, but less success in meeting congenial groups and adjusting to expected behavior, but less success in getting things done. Communities at the positive end of the dimension could be characterized as suburban, middle class communities most likely populated by blue collar workers with relatively lower incomes. The positive loading for Class, accompanied by the negative loadings for Income and Higher Education, would indicate that the occupational and public school education components of this general class dimension are resulting in the positive loadings. In other words these neighborhoods would likely be populated by persons employed in semi-professions (not the higher paid ones, however,) and clerical occupations, requiring a general high school education and limited amounts of college education. Such communities would likely place relatively high emphasis upon achievement, motivation, success, upward socio-economic mobility, etc. If this is so, the indicated success in learning how to get things done but less indicated success in finding congenial groups and adjusting to behavior expected by the college subculture would be expected. At the negative end of the dimension would be found communities with generally lower class characteristics (again resulting primarily from the occupational and educational components of this factor) less suburban in nature, but with larger proportions of the community's population having education and higher incomes. Associated with this are greater social skills but less success in learning how to get things done. One could surmise that there is less emphasis in such communities on achievement, motivation, success, upward mobility, etc.

The community characteristic of the positive pole of the second vector is similar to that described for the first vector. There is generally higher Class indicated and a more suburban type of community, but Income is lower. The Higher Education and Industrial Unionization factors are not strongly related but lower Consumption is indicated, this being consistent with the lower income. Associated with this is greater judged achievement in learning how to get things done and knowing the accepted rules of behavior. Again, the middle class and lower dimensions, however, appears to be the extent to which students adjust to the social demands placed upon them by the student subcultures through individual activity and interaction with other students (vector 1) and the extent to which they resolve these problems by merely learning and following the generally accepted rules and customs without confronting these personally and individually.

The third vector in Table V-4 indicates, at its positive pole, communities less suburban in nature and with less Industrial Unionization but greater Consumption, more urban in nature, and relatively greater Imbalance in Housing. This is associated with greater indicated success in developing a background for further education, but less success in developing skills and techniques applicable to a job and less appreciation of ideas and their usefulness. At the negative end of this dimension would be found communities with less Consumption and Imbalnce in Housing, more suburban than urban in nature, and greater Industrial

Table V-4

Canonical Correlations and Variable Weights Between
External Determinants and Measures of Student Satisfaction

| | Vector 1 | Vector 2 | Vector 3 |
|---|---|---|---|
| Correlation | .852 | .762 | .740 |
| Chi Square | 500.60 | 395.15 | 324.37 |
| Degrees of Freedom | 323 | 288 | 255 |
| External Determinants | | | |
| C1 - Class | .851 | .833 | .144 |
| C2 - Higher Education | -.316 | -.317 | .154 |
| C3 - Mobility | .325 | .279 | -.073 |
| C4 - Marital Status | .041 | -.031 | -.213 |
| C5 - Economic, Racial Discrimination | .149 | .226 | .286 |
| C6 - Industrial Unionization | .308 | .244 | -.421 |
| C7 - Imbalance in Housing | .066 | .175 | .464 |
| C8 - Young Families | -.108 | -.185 | .121 |
| C9 - Suburban Areas | .799 | .539 | -.861 |
| C10 - Large Farms | .098 | -.109 | -.005 |
| C11 - Consumption | -.180 | -.636 | .823 |
| C12 - Income | -.743 | -.730 | -.310 |
| C13 - Urbanization | -.230 | -.291 | .558 |
| F1 - Students | -.042 | .290 | .093 |
| F2 - Liberal Arts | -.022 | .281 | .073 |
| S1 - Scholarship and Intellectual Environment | .147 | -.276 | .264 |
| S2 - Sociability | .169 | -.184 | .205 |
| Satisfaction Items | | | |
| A1 - Feel Satisfied | -.114 | -.216 | .193 |
| A2 - Like College | -.011 | .262 | -.023 |
| A3 - Found congenial groups | .572 | -.030 | .185 |
| A4 - Getting things done | -.394 | -.428 | -.059 |
| A5 - Work with groups and individuals | -.024 | .096 | .017 |
| A6 - Write, speak and communicate | .121 | .104 | .107 |
| A7 - Vocational training | .038 | .223 | .342 |
| A8 - Adjusting to expected behavior | .535 | .264 | .152 |
| A9 - Knowing accepted rules and customs | .256 | -.360 | -.223 |
| A10 - Get along with others | -.097 | -.154 | -.169 |
| A11 - Think critically | -.102 | -.144 | .131 |
| A12 - Background for further education | .109 | -.037 | -.384 |
| A13 - Appreciation of science | .051 | .087 | .028 |
| A14 - Define and solve the problems | .023 | .283 | .291 |
| A15 - Modern technology | .164 | -.037 | -.205 |
| A16 - Interest in reading & learning | -.002 | -.281 | -.193 |
| A17 - Appreciation of ideas | .261 | -.019 | .551 |
| A18 - Understanding issues & problems | -.092 | .109 | -.181 |
| A19 - Appreciation of art, music, and literature | -.116 | .145 | -.110 |

Unionization. Related to this would be greater success in skills applicable to jobs, greater appreciation of ideas and their usefulness, but less success in achieving a background for further education in selected areas. Again there are similarities between the types of communities characterizing this dimension and those encountered with vector 1 and vector 2. There is, however, a more clear-cut distinction between suburban areas and what are probably central or core city areas, this being indicated by the loadings for suburban areas, Urbanization, and Imbalance in Housing. The criterion measures appear to distinguish success in preprofessional areas versus success in vocational training and what might be called general education. One might visualize crowded, core city, urban areas, that would place relatively high emphasis upon professional aspiration (manifest in the junior college as success in "background for other education") with high levels of achievement motivation and aspiration for higher socio-economic status. Opposed to this one might visualize the less crowded, more pleasant, suburban areas, which would stress aspirations for more immediate vocational training leading to employment and a general appreciation for intellectual concerns.

Although the dimensions relating external determinants and measures of student satisfaction are statistically significant, they are not as clearly defined as others discussed in this chapter. In general, although the batteries contained almost equal numbers of variables (17 and 19) a greater number of larger loadings derive from the external determinants battery. The dimensions appear to be largely defined by the external determinants, in particular the community variables. Therefore, the potential usefulness of these relationships is questionable.

The three vectors described in Table V-5 indicate relationships between the external determinants and student participation in various activities. Again, except for the first vector, the dimensions appear to represent primarily distinctions between communities, as the loadings for activities are fewer in number and generally lower in absolute value.

The positive pole of the first dimension indicates fewer suburban characteristics, a greater desire for Sociability among the students, more participation in religious groups but less visiting of art galleries and museums. Inversely, the negative direction finds more suburban-like characteristics, less preference for Sociability, less participation in religious groups but more participation in activities such as visiting art galleries. One could surmise that this dimension describes communities that are probably small, not associated with large metropolitan complexes, and with somewhat fundamentalist religious and asthetic interests verses suburban communities that are part of large metropolitan developments, with more liberal asthetic and religious concerns.

The second and third vectors presented in Table V-5 are characterized, at their positive pole, by lower general Class scores. The second vector also indicates that communities are less suburban in nature, higher Income is present, faculty members prefer less frivolous and more purposeful students, indicate less preference for Liberal Arts related programs and the students exhibit less interest in Sociability. Associated with this is greater participation in student government and sports activities as spectators. Similarily the negative pole of vector 2 is characterized by greater indicated Class, more suburban characteristics, less Income, a preference by the faculty for more frivolous (relatively) and less purposeful students, greater preference for Liberal Arts emphases and an increased preference for Sociability by students. At this negative end of the dimension there is less indicated participation in student governments and sports activities as spectator. This dimension appears to describe small but wealthy non-suburban communities that emphasize the more formal and traditional aspects of student activities as opposed to more suburban but relatively poorer communities that

## Table V-5

### Canonical Correlations and Variable Weights Between External Determinants and Student Activities

| | Vector 1 | Vector 2 | Vector 3 |
|---|---|---|---|
| Correlation | .809 | .759 | .745 |
| Chi Square | 462.16 | 374.03 | 302.84 |
| Degrees of Freedom | 272 | 240 | 210 |
| External Determinants | | | |
| C1 - Class | .114 | -.531 | -.803 |
| C2 - Higher Education | .149 | -.053 | .506 |
| C3 - Mobility | -.076 | -.381 | -.239 |
| C4 - Marital Status | -.098 | -.251 | .168 |
| C5 - Economic, Racial Discrimination | .202 | .023 | .121 |
| C6 - Industrial Unionization | -.001 | -.085 | -.313 |
| C7 - Imbalance in Housing | -.144 | .036 | .062 |
| C8 - Young Families | -.018 | -.067 | .119 |
| C9 - Suburban Areas | -.910 | -.901 | -.056 |
| C10 - Large Farms | .023 | .269 | .344 |
| C11 - Consumption | .345 | .212 | -.246 |
| C12 - Income | -.075 | .847 | .305 |
| C13 - Urbanization | .264 | .297 | .588 |
| F1 - Students | .303 | .501 | .183 |
| F2 - Liberal Arts | .081 | .664 | -.119 |
| S1 - Scholarship and Intellectual Environment | .156 | -.213 | .230 |
| S2 - Sociability | -.642 | .493 | .323 |
| Activities | | | |
| A20 - Varsity sports | -.018 | .237 | -.069 |
| A21 - Intra-mural sports | -.237 | .212 | .174 |
| A22 - Sports spectator | .090 | -.453 | -.298 |
| A23 - Publications | -.026 | .287 | .110 |
| A24 - Music Organizations | -.183 | .146 | .167 |
| A25 - Dramatics | -.162 | -.125 | .146 |
| A26 - Student government | .237 | -.532 | .038 |
| A27 - Religious groups | -.457 | -.182 | -.426 |
| A28 - Academic clubs | .213 | .335 | -.334 |
| A29 - Social groups | .196 | .037 | .154 |
| A30 - Hobby groups | -.171 | .223 | .004 |
| A31 - Attending plays and concerts | -.049 | .132 | -.055 |
| A32 - Debating groups | -.139 | .162 | -.042 |
| A33 - Service groups | .030 | -.094 | .193 |
| A34 - Visiting art galleries and museums | .647 | .091 | -.521 |
| A35 - Attending lectures | -.245 | .183 | .427 |

place less emphasis upon the formal aspects of student activities and more concern, at least by the faculty, for the more traditional liberal arts types of programs.

The third vector in Table V-5 finds lower Class but greater Urbanization and a greater proportion of the population with Higher Education at the positive end of the dimension. This is associated with greater activity in religious groups, more visiting of art galleries and museums but less activity in attending lectures. Inversely, the negative end of this dimension has higher general Class scores, is less urban in nature, fewer persons have higher education, there is less indicated activity in religious groups and activities such as visiting art galleries and museums but greater activity in attending lectures by guest speakers. This dimension appears to describe communities in which there is greater concern for both asthetic and religious activities (the religious groups most likely being in part concerned with social issues and problems) in relatively lower class urban areas, yet with higher proportions of the population having Higher Education. Inversely, there would be found communities with less interest in religious and asthetic concerns (also likely implying less interest in social issues and problems) but greater interest and participation in more passive (requiring less active participation by individual students) activities such as attending lectures, in communities with generally higher Class, relatively lower proportions of the population with Higher Education and less Urbanization.

Tables V-4 and V-5 indicate there is evidence to support one of the main hypotheses regarding expected relationships between external determinants and criterion measures. This hypothesis is only partly confirmed since no significant relationships were found between external determinants and the nine output indices. Functionally, these dimensions are not as easily explained nor would they be as useful to the "educational engineer;" (if causality is assumed) as those found between external determinants and college environments (Table V-3) and those to be described in following paragraphs, which indicate relationships between college environments and measures of satisfaction, achievement, and participation in activities. As mentioned before, these dimensions seem to primarily distinguish among communities, not among patterns of criterion measures. The achievement items indicated in Table V-4 are not those that would be of most importance to professional junior college staff members, such as items A5, A6, A10, A11, A13, A14, A15, A16, A18. One might summarize by saying that the achievement items that do seem to be related to external determinants are those of a somewhat stereotyped nature, and do not relate directly to individual student achievement, skills and accomplishments. They appear to be more descriptive of the more popular symbols of education.

Table V-6 presents the canonical correlations between the four measures of Junior College Environments and the 19 items indicative of student satisfaction and judged achievement. The first of these dimensions is characterized at its positive pole by greater Internalization and Humanism. The associated items (remembering that lower scores on the items indicate greater satisfaction and judged achievement) indicate that greater general satisfaction in indicated (A2) and a slightly greater level of achievement is reported in the areas of art, music and literature (A19). However, this positive pole of the dimension is characterized by a lessened ability to find congenial groups with which students are happy (A3). The lower loadings of item A8, indicating less success in adjusting to behavior expected by social groups in the college, and environmental scale E1, indicating lessened Conventional Conformity, further reinforce this pattern. Colleges characterized by lower scores on this first dimension would, inversly, be characterized by lower Humanism and Internalization scores, higher Conventional Conformity scores, less general satisfaction with the college,

Table V-6

Canonical Correlations and Variable Weights
Between Junior College Environments and
Measures of Student Satisfaction

| | Vector 1 | Vector 2 | Vector 3 |
|---|---|---|---|
| Correlation | .872 | .847 | .623 |
| Chi Square | 303.62 | 178.05 | 66.68 |
| Degrees of Freedom | 76 | 54 | 34 |
| Environment Scales | | | |
| E1 - Conventional Conformity | -.211 | -.824 | .703 |
| E2 - Internalization | .412 | -.270 | .586 |
| E3 - Maturation | .074 | -.797 | -.975 |
| E4 - Humanism | .770 | .180 | .225 |
| Satisfaction Items | | | |
| A1 - Feel Satisfied | .010 | .647 | .343 |
| A2 - Like College | -.661 | -.010 | -.285 |
| A3 - Found congenial groups | .428 | .442 | .014 |
| A4 - Getting things done | .038 | .159 | .006 |
| A5 - Work with groups and individuals | .086 | -.107 | -.052 |
| A6 - Write, speak and communicate | .236 | .056 | .341 |
| A7 - Vocational training | -.076 | -.169 | -.392 |
| A8 - Adjusting to expected behavior | .281 | .336 | -.119 |
| A9 - Knowing accepted rules and customs | .035 | -.057 | .079 |
| A10 - Get along with others | -.038 | -.017 | .017 |
| A11 - Think critically | .003 | -.203 | .139 |
| A12 - Background for further education | -.074 | .061 | -.077 |
| A13 - Appreciation of science | -.097 | -.103 | .087 |
| A14 - Define and solve the problems | -.165 | .060 | -.006 |
| A15 - Modern technology | .199 | .209 | -.102 |
| A16 - Interest in reading and learning | -.167 | .163 | .031 |
| A17 - Appreciation of ideas | .077 | -.212 | .320 |
| A18 - Understanding issues and problems | -.117 | .108 | -.116 |
| A19 - Appreciation of art, music and literature | -.315 | .121 | -.589 |

greater success in finding congenial groups, greater success in adjusting to expected behavior, with decreased success in developing an appreciation and enjoyment for art, music and literature. This dimension seems to measure the extent to which colleges emphasize knowledge and awareness of cultural, aesthetic, humanistic concerns, the extent to which this occurs being inversely related to emphasis upon social, interpersonal concerns.

The second dimension is defined such that colleges characterized by high scores on this vector would exhibit low scores on Conventional Conformity (E1) and Maturation (E3). Concomitantly there would be less general satisfaction with the college (A1), less success in finding congenial groups (A3), and less success in adjusting to behavior expected by college social groups (A8). Inversely, colleges at the lower end of this second vector would exhibit greater Conventional Conformity and Maturation with greater general satisfaction, greater success in finding congenial groups, and greater success in adjusting to expected behaviors. This second vector then describes differences among colleges that primarily obtain from social concerns, interpersonal relations, participation in groups, "belonging," etc. The relatively small loadings for items A11, developing an ability to think critically, A17, acquiring an appreciation of ideas and their usefulness, and A15, knowledge of and facility in applying principles of modern technology, lend further evidence to this person-orientedness as opposed to the object or subject matter orientedness. The moderate negative loading of Scale E2, Internalization, coincides with this general pattern.

The third canonical dimension is characterized in its positive direction by higher scores on Conventional Conformity and Internalization, and lower scores on Maturation. This positive direction is characterized by less "feeling satisfied" (A1), greater "liking" (A2), less success in writing, speaking and communicating (A6), greater success in learning skills directly applicable to a job (A7), less success in appreciating and acquiring ideas (A17), and greater success in appreciating art, music and literature (A19). Colleges characteristic of the negative end of this dimension would exhibit lower Conventional Conformity and Internalization scores, higher Maturation scores, greater satisfaction, lessened "liking," greater achievement in writing, speaking and communicating, lessened success in learning skills and techniques directly applicable to a job, greater success in acquiring and appreciating ideas, and lessened success in appreciating and enjoying art, music and literature. This basic dimension appears to describe an "occupational" and "practical" emphasis versus one of individual achievement, independence, and concern with ideas and the communication of ideas. This dimension, probably better than any others in this study, describes the varying degrees of emphasis upon occupationally oriented education, training for employment, etc., that exists in public junior colleges. The relatively small loading of Scale E4, Humanism, reinforces this pattern.

The interesting behavior of items A1, "How much of the time do you feel satisfied with your college?", A2, "How much do you like your college?", and A3, "To what extent have you found groups in the college which were really congenial and with which you felt happy?", should be noted. Their loadings upon the three basic dimensions recorded in Table V-6 indicates that although they are highly intercorrelated they do differentiate rather effectively. In the first dimension, liking and finding congenial groups load in opposing directions. It seems that in certain types of colleges (higher Internalization, higher Humanism, and slightly lower Conventional Conformity being characteristic) students may dislike the college yet find and belong to congenial groups of students. Examination of the loadings of these three items on the second and third canonical vectors requires the conclusion that by expressing "satisfaction" with the college, the students are referring primarily to their social involvement and status in the institution, primarily that of the students appear to be concerned with achievement, and the extent to which the college is permitting them to develop along lines they consider desireable as opposed to participation in the student subculture.

Table V-7 reports the three statistically significant canonical correlations between Junior College Environment Scales and reported participation in student activities. Examining the first vector, it is found that greater Conventional Conformity scores and lesser Humanism scores are found to be associated with greater reported participation in sports events as spectator, greater participation in religious groups, hobby groups but less participation in activities such as visiting art exhibits, art galleries, museums, etc. Inversely, lower Conventional Conformity scores and higher Humanism scores are associated with greater participation in activities such as visiting art exhibits,' art galleries and museums but decreased participation in hobby groups, religious groups and spectator sports. This dimension then, at its positive end, appears to describe a college in which there is more interest in group activities, social interaction, generally directed toward non-aesthetically oriented participation. Judgements concerning the quality of a student's participation in the indicated activities would obtain primarily from others involved in the activity. This would be especially true of spectator sports and hobby groups. At the opposite end of this dimension a college would be characterized by emphasis upon activities less social but more cultural in nature. Judgements concerning the quality of participation would obtain primarily from the individual participating as opposed to other students. This would be especially true of activities such as visiting art galleries and museums.

The second vector indicates that lower scores for Conventional Conformity and Internalization and higher scores for Maturation are associated with greater reported participation in student government and generally less participation in other activities, especially varsity sports, visiting art galleries and museums, attending lectures, and participating in academically related clubs, debating groups, etc. Inversely, higher Conventional Conformity and Internalization scores and lower Maturation scores are associated with less participation in student government activities but greater participation in varsity sports, attendance at lectures, debating groups, academic groups, art galleries and museums. Given the content of the Maturation scale, which describes an environment which encourages individuality, growth, and independence, this pattern of relationships with greater reported participation in student government and less reported participation in activities that do not primarily involve bureaucratic types of relationships with other students and activities of primarily an individual nature, is not surprising.

The third vector indicates that lower Conventional Conformity and Humanism scores are associated with higher Internalization and Maturation scores are related to greater reported participation as spectators of sports events, participation in service clubs and visiting of art exhibits, galleries, and museums. Inversely, greater Conventional Conformity and Humanism scores and lower Internalization and Maturation scores are related to less participation in service groups, spectator sports and art related activities but greater participation in debate groups, social groups and religious groups. Generally, the positive end of this dimension appears to describe colleges which emphasize participation and achievement in areas that are intrinsically rewarding to the individual (spectator sports, service, art galleries), whereas the negative end of this dimension appears to be characterized by colleges which emphasize participation and activity in areas that extrinsically obtain "rewards" from a larger social system (social groups and religous groups).

Table V-7

Canonical Correlations and Variable Weights Between Junior College Environments and Student Activities

| | Vector 1 | Vector 2 | Vector 3 |
|---|---|---|---|
| Correlation | .849 | .711 | .504 |
| Chi Square | 230.58 | 116.58 | 53.65 |
| Degrees of Freedom | 64 | 45 | 28 |
| Environment Scales | | | |
| E1 - Conventional Conformity | .714 | -.504 | -.433 |
| E2 - Internalization | -.143 | -.499 | .418 |
| E3 - Maturation | -.117 | .650 | .552 |
| E4 - Humanism | -.676 | -.273 | -.577 |
| Activities | | | |
| A20 - Varsity sports | .053 | .308 | .024 |
| A21 - Intramural sports | -.199 | .017 | .030 |
| A22 - Sports spectator | -.610 | .117 | -.807 |
| A23 - Publications | -.039 | -.038 | -.029 |
| A24 - Music Organizations | -.019 | .009 | -.006 |
| A25 - Dramatics | .152 | -.069 | .016 |
| A26 - Student government | -.055 | -.430 | .174 |
| A27 - Religous groups | -.369 | .212 | .308 |
| A28 - Academic clubs | .178 | .265 | .257 |
| A29 - Social groups | -.105 | .163 | .385 |
| A30 - Hobby groups | -.315 | .025 | .128 |
| A31 - Attending plays and concerts | -.045 | -.125 | .039 |
| A32 - Debating groups | .128 | .272 | .470 |
| A33 - Service groups | -.160 | -.254 | -.563 |
| A34 - Visiting art galleries and museums | .708 | .510 | -.419 |
| A35 - Attending lectures | .029 | .261 | -.129 |

The three canonical correlations relating JCES scores and measures of satisfaction and achievement (Table V-6) and the three canonical correlations relating JCES scores and participation in activities (Table V-7) actually produce five patterns of relationships. The loadings for JCES dimensions on the third vector in Table V-6 are quite similar (with direction of loading reversed) to those found for the second vector of Table V-7. The direction (again reversing the signs for one of the dimensions) and content of associated satisfaction, achievement, and activity items, reinforces this similarity. Table V-8 summarizes these five patterns.

As previously mentioned, satisfaction (with other students and life at the college) is positively associated with Conventional Conformity scores, and "liking" (the college, its programs, congruence with student goals, etc.) is primarily found with higher Internalization scores and lower Maturation scores. The simultaneous occurence of higher Conventional Conformity scores, with higher Internalisation and lower Maturation, is associated with less satisfaction (see the fourth pattern in Table V-8, the third vector in Table V-6, and the second vector in Table V-7). In the first pattern presented in Table V-6, it is found that higher Conventional Conformity and Maturation scores are associated with both greater satisfaction and liking. In general, higher scores on these two environmental dimensions appear to be related to increased social skills and a more positive evaluation of the college. This is a reasonable relationship, considering the group pressure characteristics of the Conventional Conformity scale and the emphasis upon individual maturity and responsibility in the Maturation scale. The presence of greater Maturation would seem to counterbalance the possible "herd" or "mob" characteristics of the Conventional Conformity scale, whereas it in turn counterbalances the possible isolation and alienation that might be expected to accompany extreme Maturation scores.

The indicated relationships between Junior College Environment Scales and items indicating student satisfaction, judged achievement, and participation in activities, partially confirms another of the major hypotheses of this study. Internal determinants are, in part, functionally related with some of the criterion measures. It is observed, and will be pointed out again in the discussion of the regression analyses, that if one wishes to maximize a number of criterion measures (assuming that measures such as satisfaction, liking, achievement and activity in academic areas, social skills and relationships, are valued positively) this cannot be accomplished by any one pattern of environmental dimensions (assuming for the sake of illustration that causal relationships exist). An "educational engineer" would always be faced with the problem of balancing negative and positively valued relationships, in order to arrive at a most acceptable or a least unacceptable compromise.

## Regression Analysis

Questions concerning the relationships between individual variables, whether in the same "group" of variables or in different "groups," can be examined by referring to the individual correlations listed in Table V-2. The statistical significance of these correlation coefficients may be determined by calculating a t ratio or consulting an appropriate table giving values of the correlation coefficient significant at different probability levels, with 98 degrees of freedom. Approximately, correlations with absolute values greater than .196 are statistically significant at the 5 percent level, and correlation coefficients with absolute values greater than .255 are statistically significant at the 1 percent level of confidence.

## Table V-8

## Summary of Five Patterns Among JCES and Measures of Satisfaction, Judged Achievement and Participation in Activities

| JCES Patterns (Direction of Deviations from Mean on Scales) | | | | Associated Patterns of Achievement and Activity Items |
|---|---|---|---|---|
| I | II | III | IV | |
| + | | + | | more satisfaction and "liking", success in finding congenial groups, and adjusting to expected behavior (increased social skills) |
| - | | - | | less satisfaction and "liking", success in finding congenial groups, and adjusting to expected behavior (decreased social skills) |
| + | | | - | more informal social interaction, less cultural activity |
| - | | | + | less informl social interaction, more cultural activity |
| | + | | + | more satisfaction, achievement in arts and humanities,<br>less success in finding congenial groups |
| | - | | - | less satisfaction, achievement in arts and humanities,<br>more success in finding congenial groups |
| + | + | - | | less satisfaction achievement in communicating, appreciating and using ideas, formal social interaction,<br>more "liking", achievement in learning job skills, achievement in arts and humanities, informal social interaction, academic activity |
| - | - | + | | more satisfaction, achievement in communicating, appreciating and using ideas, formal social interactions,<br>less "liking", achievement in learning job skills, achievement in arts and humanities, informal social interaction, academic activity |

Table V-8 Continued

| JCES Patterns (Direction of Deviations from Mean on Scales) I | II | III | IV | Associated Patterns of Achievement and Activity Items |
|---|---|---|---|---|
| + | - | - | + | less formal social interaction, service group activity<br>more academic activity |
| - | + | + | - | more informal social interaction, service group activity<br>less academic activity |

To examine relationships among these variables in a more traditional manner, the variables were regrouped into two batteries of predictors and criterion measures. The predictor variables consisted of the community variables, student preference scales, faculty preference scales, and Junior College Environment Scales. These 21 predictors were then used to predict each of 44 criterion measures, which consisted of the nine output indices and the 35 attitudinal items. A stepwise multiple regression computer program was used to form each of these 44 regression equations. (An adaptation of the BMDO2R program, developed by personnel of the bio-medical statistics staff at the University of California, Los Angeles was used.) This program begins by selecting that predictor variable which has the highest correlation with the indicated criterion. For the second "step" the program selects that predictor variable, not in the first equation, which will result in the largest increase in the multiple R. After each "step" an F ratio is computed for each predictor in the regression equation. If this F ratio falls below a specified value at the end of any particular step for a given variable, that variable is then dropped from the next regression equation. Before each "step" an F ratio is formed for each predictor variable not in the equation. That variable with the highest F ratio, equal to or greater than a specified value, is added to the equation during the following step. For the analyses reported in Tables V-9, V-10, and V-11, F ratios were specified so that the resulting regression equations predicting each of the 44 individual criterion measures from the 21 predictor variables, would include only those predictor variables whose regression coefficients were statistically significant at the 5 percent level of confidence. All of the resulting multiple correlation coefficients were statistically significant at the 1 percent level of confidence. Table V-9 reports the regression equations resulting from analysis of the nine output indices as criterion measures. Table V-10 reports the regression equations resulting from analysis of the 19 satisfaction and achievement items as criterion measures. Table V-11 reports the regression equations resulting from analysis of the 16 activity items as criterion measures.

All but one of the nine output indices can be predicted, with statistically significant multiple correlation coefficients, from a combination of the 21 independent variables. Examination of the multiple correlation coefficients in Table V-9, however, indicates that even though statistical significance is achieved, the proportion of variance accounted for in the criterion measures is relatively small. Cursory examination of Tables V10- and V11 indicates that a greater proportion of the variance is accounted for when the criterion variables are indications of satisfaction, achievement, and participation in activities. This appears to be more true of the satisfaction and achievement items since the multiple correlation coefficients are generally larger than those for the activity items.

The associate degree index is related to greater industrial and unionization but lower scores on Internalization and Maturation. The negative relationship of these two variables is somewhat unexpected. Further examination of the nature of these scales, however, makes this less surprising. Both scales emphasize more personal and individual interests, involvements, and activities. Individual growth, responsibility, independence, accomplishment, awareness and concern of social and political problems are prevalent. Some items indicate that a certain amount of "inner-directedness," especially indicative of the students, is characteristic of the environment. One might expect as a concomitant of this greater Internalization and Maturation, a greater concern by students for learning and education as an end rather than a means to achieve the more visible symbols of success such as degrees and certificates.

## Table V-9

## Regression Equations* Which Predict Nine Output Indices

| | CRITERION VARIABLE | | | | | |
|---|---|---|---|---|---|---|
| | 01-AA Index | Regression Coeff. | 02-TR Index | Regression Coeff. | 03-OP Index | Regression Coeff. |
| Independent Variable | C6-Industrial Unionization | .08 | S1-Scholarship and Intellectual Envrionment | -2.10 | (No independent variable was significantly related to this criterion variable.) | |
| | E2-Internalization | -3.03 | E2-Internalization | -1.97 | | |
| | E3-Maturation | -5.00 | | | | |
| | Regression Constant | 141.0 | Regression Constant | 269.8 | | |
| | Multiple R | .359 | Multiple R | .323 | | |
| | Multiple F Ratio | 4.72 | Multiple F Ratio | 5.65 | | |

| | CRITERION VARIABLE | | | | | |
|---|---|---|---|---|---|---|
| | 04-EMP Index | Regression Coeff. | 05-BA Index | Regression Coeff. | 06-PR Index | Regression Coeff. |
| Independent Variable | C1-Class | 3.24 | C3-Mobility | .94 | C11-Consumption | .01 |
| | S1-Scholarship and Intellectual Environment | 1.10 | C5-Economic, Racial Discrimination | .29 | | |
| | S2-Sociability | -2.64 | | | | |
| | Regression Constant | 147.9 | Regression Constant | 61.8 | Regression Constant | .17 |
| | Multiple R | .410 | Multiple R | .352 | Multiple R | .288 |
| | Multiple F Ratio | 6.46 | Multiple F Ratio | 4.51 | Multiple F Ratio | 8.85 |

| | CRITERION VARIABLE | | | | | |
|---|---|---|---|---|---|---|
| | 07-DI Index | Regression Coeff. | 08-TR Percent | Regression Coeff. | 09-OP Percent | Regression Coeff. |
| Independent Variable | C11-Consumption | .0035 | E1-Conventional Conformity | .60 | C3-Mobility | .66 |
| | | | | | E3-Maturation | - .65 |
| | Regression Constant | -2.3 | Regression Constant | -1.6 | Regression Constant | 54.7 |
| | Multiple R | .367 | Multiple R | .326 | Multiple R | .314 |
| | Multiple F Ratio | 7.53 | Multiple F Ratio | 11.61 | Multiple F Ratio | 5.32 |

*All F ratios for multiple R's are significant at the .01 level of confidence.
All F ratios for individual regression coefficients are significant at the .05 level of confidence.

The transfer index appears to be greater in schools where the students prefer a scholarly and intellectual environment, (S1) but where Internalization scores are lower. The relationship of the student preference dimension is expected, but the negative relationship for internalization probably exists for reasons similar to those in the previous paragraph.

The failure of any individual or combination of variables to predict significantly the variation in the occupational program completion index reflects the difficulties that have been encountered in other studies in predicting occupational success and achievement in occupational training programs, whether "individual" or "group" scores are used. In the present study these variables (OP Index and EMP Index) are most likely to contain measurement error since occupational programs vary in character more drastically from college to college than do transfer-oriented programs.

Communities possessing generally greater class and students preferring more sociable environments and not preferring scholarly and intellectual environments are more predictive of greater proportions of students in occupational programs being employed in jobs related to their training. These relationships are entirely as might be expected since the preference for less-scholarly environments but more-sociable environments would be indicative of students of generally lesser interests and abilities and more immediate concerns for employment and the results of employment.

Greater mobility and economic and racial discrimination within the community is predictive of higher proportions of students who transfer completing the B.A. degree. Since mobility is often accompanied by greater economic and racial discrimination (migrant workers, construction workers, etc.) the presence of these two variables is not surprising. The fact that they are positively related to higher B.A. indices probably results from the absence of the more mobile and discriminated segment of the population from the college, the B.A. index then resulting from the performance of the more stable segment of the student population.

The association of greater consumption in the communities with greater probation and dismissal indices could result from the "distraction" of students by the "enjoyment of the good life", which they can evidently afford.

Conventional Conformity is positively associated with larger proportions of the student-body being enrolled in transfer programs. This probably results from the groups pressure characteristics of the Conventional Conformity dimension serving as a vehicle for the intensification of the general social pressure for and desirability of traditional academic education, which is viewed as a means for achieving greater social and economic mobility and status within the society.

Greater mobility and lower Maturation scores are associated with greater proportions of the student body being enrolled in occupational programs. Since lower Maturation scores would be generally indicative of less responsibility and individuality and less "goal-directedness" in the student population, this perhaps explains the negative relationship between Maturation and percent of students in occupational programs. Also, it would be reasonable to expect that fewer students would possess the abilities required by the more traditional transfer and academic programs and the students with the indicated characteristics would be more easily persuaded by vigorous counselors and faculty members to enroll in occupational programs.

In the examination of Tables V-10 and V-11 it must be remembered that lower numerical scores on the criterion measures indicate greater satisfaction, greater judged achievement, and more participation in the indicated activities.

Many of these equations merely reflect, in simlified form, the relationships defined by the canonical analyses. In general, higher scores on the Junior College Environment Scales are related to greater satisfaction and judged achievement. The major exception appears to be that higher humanism scores are associated with lower judged achievement in learning skills for employment (A7), adjusting to expected behavior (A8), and learning the accepted rules and customs (A9). The other "negative" relationship is found in connection with item A15 which indicates that higher Maturation scores are associated with lower judged achievement in knowing and applying the principles of modern technology. The negative relationships for Humanism are quite reasonable. The negative relationship for Maturation and the modern technology item probably is indicative of less interest in purely technical areas by students that are in an environment which presses them towards greater responsibility, individuality, etc.

It is interesting to note, and completely expected, that greater student interest and preference for a Scholarly and Intellectual Environment is associated with lower success in finding congenial groups (A3), learning how to get things done (A4), learning to work with groups and individuals (A5), learning employable skills (A7), adjusting to expected behavior (A8), and learning and knowing accepted rules and customs (A9). It is also interesting to observe that this student preference dimension is not associated with greater achievement in those items where such relationships might be expected, such as items A6, A11, A12, A13, A14, and other scholarly and academic achievement areas.

Student preferences regarding Sociability are related to fewer items. Greater preferences for Sociability are associated with greater achievement in vocational training (A7), appreciation of science (A13), and less achievement in understanding issues and problems (A18).

The faculty preference dimension regarding Liberal Arts is the only such dimension related to these criterion measures. This indicates that greater faculty preference for liberal arts programs is associated with less indicated achievement in knowledge and facility in applying principles of modern technology (A15).

In general, as was true with the canonical analyses, the college environment dimensions are more effective in predicting the satisfaction and achievement items, than the community variables, student preference scales, and faculty preference scales. The functionally-related external determinants are primarily those descriptive of the Class, Higher Education, Income, Industrial Unionization and suburban versus urban characteristics of the community. Those items that would be operationally defined to a larger extent within the college community, such as the satisfaction and liking items, the expected behavior item (A8), and other items appear to be more strongly predicted by the college environments as opposed to external determinants. Other items, being closely related to classroom and other learning activities that would predominate in the college, such as items A16 and A19, are also more heavily determined by the college environments. Items which might more likely have as referents groups of people and activities outside of the college or items less likely to be controlled by the college, are generally more strongly determined by external determinants, such as the congenial group item (A3), getting things done (A4), etc.

One of the more interesting results of the regression analyses, which did not appear in the canonical analyses due to the absence of significant relationships with the nine output indices, is that there are apparent conflicts between the relationships of these environmental dimensions with output indices and judged student satisfaction and achievement. If it is assumed that greater

## Table V-10

### Regression Equations* Which Predict 19 Satisfaction and Achievement Items

| | Criterion Variable | | | |
|---|---|---|---|---|
| | A1-Feel satisfied | Regression Coeff. | A2-Like college | Regression Coeff. |
| Independent Variable | C5-Economic, Racial Discrimination | .0030 | C5-Economic, Racial Discrimination | .0043 |
| | C7-Housing Imbalance | .0023 | C8-Young Families | .0017 |
| | C10-Large Farms | -.0001 | E1-Conventional Conformity | -.0084 |
| | E1-Conventional Conformity | -.0045 | E2-Internalization | -.0114 |
| | E2-Internalization | -.0097 | E3-Maturation | -.0136 |
| | E3-Maturation | -.0252 | E4-Humanism | -.0129 |
| | Regression Constant | 4.0 | Regression Constant | 3.7 |
| | Multiple R | .825 | Multiple R | .836 |
| | Multiple F Ratio | 33.05 | Multiple F Ratio | 35.85 |

| | Criterion Variable | | | |
|---|---|---|---|---|
| | A3-Found congenial groups | Regression Coeff. | A4-Getting things done | Regression Coeff. |
| Independent Variable | C4-Marital Status | -.0043 | C1-Class | -.0026 |
| | C5-Economic, Racial Discrimination | .0019 | C2-Higher Education | .0172 |
| | C10-Large Farms | .0001 | C3-Mobility | -.0090 |
| | C13-Urbanization | .0002 | C4-Marital Status | -.0042 |
| | S1-Scholarship and Intellectual Environment | .0058 | C6-Industrial Unionization | -.0002 |
| | E1-Conventional Conformity | -.0145 | C11-Consumption | .0002 |
| | | | S1-Scholarship and Intellectual Environment | .0047 |
| | | | E1-Conventional Conformity | -.0080 |
| | Regression Constant | 3.0 | Regression Constant | 1.99 |
| | Multiple R | .825 | Multiple R | .685 |
| | Multiple F Ratio | 32.93 | Multiple F Ratio | 10.04 |

*All F ratios for multiple R's are significant at the .01 level of confidence.
All F ratios for individual regression coefficients are significant at the .05 level of confidence.

Table V-10 Continued

Criterion Variable

|  | A5-Work with groups and individuals | Regression Coeff. | A6-Write, speak and communicate | Regression Coeff. |
|---|---|---|---|---|
| Independant Variable | C9-Suburban Areas | -.00001 | C1-Class | -.0112 |
|  | S1-Scholarshipaand Intellectual |  | C8-Young Families | .0014 |
|  | Environment | .0054 | E3-Maturation | -.0088 |
|  | Regression Constant | 1.82 | Regression Constant | 2.65 |
|  | Multiple R | .494 | Multiple R | ..460 |
|  | Multiple F Ratio | 7.65 | Multiple F Ratio | 8.61 |

Criterion Variable

|  | A7-Vocational training | Regression Coeff. | A8-Adjusting to expected behavior | Regression Coeff. |
|---|---|---|---|---|
| Independent Variable | C4-Marital Status | -.0083 | S1-Scholarship and Intellectual |  |
|  | C5-Economic, Racial Discrimination | .0042 | Environment | .0068 |
|  | S2-Sociability | .0295 | E2-Conventional Conformity | -.0058 |
|  | E4-Humanism | .0223 | E3-Internalization | -.0047 |
|  |  |  | E4-Humanism | .0185 |
|  | Regression Constant | -.13 | Regression Constant | 1.98 |
|  | Multiple R | .56 | Multiple R | .746 |
|  | Multiple F Ratio | 10.92 | Multiple F Ratio | 23.53 |

Table V-10 Continued

Criterion Variable

| | A9-Knowing accepted rules and customs | Regression Coeff. | A10-Get along with others | Regression Coeff. |
|---|---|---|---|---|
| Independent Variable | C6-Industrial Unionization | -.0002 | C5-Economic, Racial Discrimination | -.0020 |
| | S1-Scholarship and Intellectual Environment | .0077 | C7-Housing Imbalance | .0014 |
| | E1-Conventional Conformity | -.0107 | E1-Conventional Conformity | -.0031 |
| | E4-Humanism | .0161 | | |
| | Regression Constant | 1.95 | Regression Constant | 2.09 |
| | Multiple R | .649 | Multiple R | .401 |
| | Multiple F Ratio | 17.23 | Multiple F Ratio | 6.14 |

Criterion Variable

| | A11-Think " Critically | Regression Coeff. | A12-Background for further education | Regression Coeff. |
|---|---|---|---|---|
| Independent Variable | C6-Industrial Unionization | -.0001 | C1-Class | -.0042 |
| | | | C4-Marital Status | -.0055 |
| | | | C7-Housing Imbalance | -.0027 |
| | | | C11-Consumption | -.0002 |
| | | | C12-Income | .0059 |
| | | | E3-Maturation | -.0138 |
| | Regression Constant | 2.31 | Regression Constant | 3.50 |
| | Multiple R | .275 | Multiple R | .581 |
| | Multiple F Ratio | 8.00 | Multiple F Ratio | 7.90 |

Table V-10 Continued

Criterion Variable

|  | A13-Appreciation of science | Regression Coeff. | A14-Define and solve problems | Regression Coeff. |
|---|---|---|---|---|
| ndependent Variable | S2-Sociability | .0134 | C3-Mobility | .0054 |
|  | E4-Humanism | -.0183 | C4-Marital Status | -.0064 |
|  |  |  | C9-Suburban Areas | -.00002 |
|  |  |  | C12-Income | .0015 |
|  |  |  | E3-Maturation | -.0041 |
|  | Regression Constant | 1.72 | Regression Constant | 2.98 |
|  | Multiple R | .419 | Multiple R | .541 |
|  | Multiple F Ratio | 10.33 | Multiple F Ratio | 7.79 |

Criterion Variable

|  | A15-Modern technology | Regression Coeff. | A16-Interest in reading and learning | Regression Coeff. |
|---|---|---|---|---|
| ndependent Variable | C4-Marital Status | -.0066 | E3-Maturation | -.0078 |
|  | F2-Liberal Arts | -.0177 | E4-Humanism | -.0142 |
|  | E1-Conventional Conformity | -.0087 |  |  |
|  | E3-Maturation | .0095 |  |  |
|  | Regression Constant | 4.14 | Regression Constant | 3.01 |
|  | Multiple R | .491 | Multiple R | .512 |
|  | Multiple F Ratio | 7.53 | Multiple F Ratio | 17.24 |

Table V-10 Continued

Criterion Variable

|  | A17-Appreciation of ideas | Regression Coeff. | A18-Understanding issues and problems | Regression Coeff. |
|---|---|---|---|---|
| Independent Variable | C1-Class | -.0032 | C1-Class | -.0021 |
|  | C2-Higher Education | -.0137 | C9-Suburban Areas | -.00002 |
|  | C4-Marital Status | -.0047 | C12-Income | .0042 |
|  | C6-Industrial Unionization | -.0002 | S2-Sociability | -.0096 |
|  | C9-Suburban Areas | -.00002 | E2-Internalization | -.0111 |
|  | C12-Income | .0049 |  |  |
|  | E2-Internalization | -.0054 |  |  |
|  | E3-Maturation | -.0067 |  |  |
|  | Regression Constant | 3.05 | Regression Constant | 3.66 |
|  | Multiple R | .722 | Multiple R | .600 |
|  | Multiple F Ratio | 12.40 | Multiple F Ratio | 19.04 |

Criterion Variable

|  | A19-Appreciation of arts, music and literature | Regression Coeff. |
|---|---|---|
| Independent Variable | C11-Consumption | -.0033 |
|  | C12-Income | .0045 |
|  | E2-Internalization | -.0226 |
|  | E3-Maturation | -.0160 |
|  | Regression Constant | 3.80 |
|  | Multiple R | .667 |
|  | Multiple F Ratio | 19.04 |

satisfaction and judged achievement is generally more desirable and that higher output indices are more desirable, the Junior College Environment Scales are then associated negatively with output indices but positively with judged achievement and satisfaction, in most instances. A few exceptions were discussed in preceding paragraphs. This finding underlines the importance of selecting and defining appropriate criterion measures. The previously mentioned desirability of individual measures as opposed to group measures assumes greater importance. Ideally, criterion measures that reflect real individual achievement rather than judged achievement would be more ideal both as individual measures and group measures. Also, as was indicated in the discussion of the canonical analyses, there are conflicting "effects" that prohibit any simple selection of environment scales patterns in order to maximize criterion measures. The relative values of certain criterion measures would need to be considered in order to reach the most effective compromise for any particular institution.

Table V-11 reports the regression equations resulting from use of the activity items as criterion measures. In general, higher college environment scores are associated with greater participation. The environment scale which seems to be most closely related to activity is, as would be expected, the Conventional Conformity scale. One of the exceptions is the Maturation scale, which is negatively related to participation in varsity sports, participation as sports spectator, participation in academic clubs, social groups, debating groups and visiting art galleries and museums. Considering the large number of items which describe individual activity and endeavor in the Maturation scale, this relationship is not surprising. In general, the Maturation scale enters the equations for those criterion variables which require greater group participation and interaction. The visiting of art galleries and museums is the only significant exception. In general, the other environmental dimensions enter the equations where their functional relationship with the criterion variable might be expected. For example, higher scores on Humanism are associated with greater participation in academic clubs.

The faculty preference dimensions are relatively unrelated to participation in activities. Faculty preferences for more purposeful, serious students, as opposed to preferences for less serious, more frivilous, socially inclined students is associated with greater participation in religious groups but less participation in academic clubs. This second relationship is somewhat surprising, but can possibly be explained as before, as a "reaction". For example, excessive emphasis by faculty members for serious study and the pursuit of academic goals could result in a reaction, by the students, resulting in less participation in extracurricular activities of an academic nature. Table V-11 also indicates that a preference for Liberal Arts programs by the faculty is associated with greater reported attendance at plays and concerts.

One of the most frequently appearing independent variables in the equations listed in Table V-11, is Scale S2-Sociability, indicating that students' preferences for group participation and social interaction is related in general to greater participation in a number of specific activities. In several instances, Sociability is the only independent variable significantly related to the criterion variable, such as participation in publications, music organizations, and dramatics.

To an even greater extent than was observed in Table V-10, the Junior College Environment Scales are more frequently related to participation in activities, as reported in Table V-11. The student preference for sociability is also frequently related, as indicated above. Faculty preference dimensions are infrequently related, as are the community variables. In general, these

### Table V-11

### Regression Equations* Which Predict 16 Activity Participation Items

Criterion Variable

| | A20-Varsity sports | Regression Coeff. | A21-Intramural sports | Regression Coeff. |
|---|---|---|---|---|
| Independent Variable | C4-Marital Status | -.0069 | C10-Large Farms | .0002 |
| | C7-Housing Imbalance | -.0028 | S2-Sociability | .0296 |
| | S1-Scholarship and Intellectual Environment | -.0084 | E1-Conventional Conformity | -.0193 |
| | S2-Sociability | .0230 | | |
| | E1-Conventional Conformity | -.0132 | | |
| | E3-Maturation | .0151 | | |
| | Regression Constant | 3.02 | Regression Constant | 1.02 |
| | Multiple R | .688 | Multiple R | .661 |
| | Multiple F Ratio | 13.93 | Multiple F Ratio | 18.43 |

Criterion Variable

| | A22-Sports spectator | Regression Coeff. | A23-Publications | Regression Coeff. |
|---|---|---|---|---|
| Independent Variable | C10-Large Farms | -.0002 | S2-Sociability | .0312 |
| | E1-Conventional Conformity | -.0137 | | |
| | E2-Internalization | -.0170 | | |
| | E3-Maturation | .0498 | | |
| | Regression Constant | 3.41 | Regression Constant | 1.34 |
| | Multiple R | .741 | Multiple R | .466 |
| | Multiple F Ratio | 28.83 | Multiple F Ratio | 27.11 |

*All F ratios for multiple R's are significant at the .01 level of confidence.
All F ratios for individual regession coefficiants are significant at the .05 level of confidence.

## Table V-11 Continued

Criterion Variable

| | A24-Music organization | Regression Coeff. | A25-Dramatics | Regression Coeff. |
|---|---|---|---|---|
| Independent Variable | S2-Sociability | .0233 | S2-Sociability | .0211 |
| | Regression Constant | 2.08 | Regression Constant | 2.48 |
| | Multiple R | .325 | Multiple R | .359 |
| | Multiple F Ratio | 11.06 | Multiple F Ratio | 14.53 |

Criterion Variable

| | A28-Academic clubs | Regression Coeff. | A29-Social groups | Regression Coeff. |
|---|---|---|---|---|
| Independent Variable | C12-Income | .0022 | C9-Suburban Areas | -.00002 |
| | F1-Students | .0216 | C10-Large Farms | .0001 |
| | E1-Conventional Conformity | -.0124 | E1-Conventional Conformity | -.0143 |
| | E2-Internalization | -.0090 | E3-Maturation | .0235 |
| | E3-Maturation | .024 | | |
| | E4-Humanism | -.0149 | | |
| | Regression Constant | 2.53 | Regression Constant | 3.93 |
| | Multiple R | .592 | Multiple R | .512 |
| | Multiple F Ratio | 8.36 | Multiple F Ratio | 8.45 |

Table V-11 Continued

|  | Criterion Variables |  |  |  |
|---|---|---|---|---|
|  | A30-Hobby groups | Regression Coeff. | A31-Attending plays and concerts | Regression Coeff. |
| Independent Variable | S2-Sociability | .0234 | C2-Higher Education | -.0493 |
|  |  |  | C12-Income | .0034 |
|  |  |  | F2-Liberal Arts | .0245 |
|  | Regression Constant | 2.08 | Regression Constant | 2.21 |
|  | Multiple R | .379 | Multiple R | .408 |
|  | Multiple F Ratio | 16.46 | Multiple F Ratio | 6.37 |

|  | Criterion Variable |  |  |  |
|---|---|---|---|---|
|  | A32-Debating groups | Regression Coeff. | A33-Service group | Regression Coeff. |
| Independent Variable | C11-Consumption | .0001 | E1-Conventional Conformity | -.0074 |
|  | S2-Sociability | .0246 |  |  |
|  | E3-Maturation | .0074 |  |  |
|  | E4-Humanism | -.0163 |  |  |
|  | Regression Constant | 1.78 | Regression Constant | 4.58 |
|  | Multiple R | .466 | Multiple R | .357 |
|  | Multiple F Ratio | 6.59 | Multiple F Ratio | 14.30 |

Table V-11 Continued

Criterion Variable

| | A34-Attending lectures | Regression Coeff. | A35-Visiting art galleries and museums | Regression Coeff. |
|---|---|---|---|---|
| Independent Variable | S2-Sociability | .0271 | C1-Class | .0021 |
| | E2-Internalization | -.0226 | C9-Suburban Areas | -.00002 |
| | | | E2-Internalization | .0213 |
| | | | E3-Maturation | .0096 |
| | | | E4-Humanism | -.0223 |
| | Regression Constant | 4.29 | Regression Constatt | 1.17 |
| | Multiple R | .719 | Multiple R | .415 |
| | Multiple F Ratio | 20.07 | Multiple F Ratio | 10.07 |

functionally related community characteristics mainly reiterate the relationships pointed out during examination of the canonical analyses. As before, the positive relationships between Junior College Environment Scales and greater reported participation is in conflict with the negative relationship between Junior College Environment Scales and the output indices.

## Discussion, Conclusions, and Implications

All three of the major hypotheses which predicted significant canonical correlations between the battery of external determinants and internal determinants (Junior College Environment Scales), between the external determinants and batteries of criterion measures, and between the internal determinants (Junior College Environment Scales) and batteries of criterion measures, were at least in part confirmed. The regression analyses, although they did not relate directly to the three major hypotheses, tended to confirm the results of the canonical analyses and offered some additional information which would be useful in attempting any "educational engineering" in individual colleges. Also, the regression analyses provided some information which assisted in explaining the partial failure to confirm the sub-hypotheses which predicted significant canonical correlations between the external determinants and output indices.

The sub-hypothesis which predicted functional relationships between internal environment measures (JCES) and the nine output indices, was not confirmed. Table V-2 and the discussion of regression analyses indicate significant relationships between individual variables but not any statistically significant canonical correlations between these two batteries. In part, this could be explained by the presence of measurement error in the output indices, in spite of the precautions described in Chapter IV and elsewhere. The appropriateness of these output indices as criterion measures could be questioned. The desirability of defining criterion measures in more individualistic terms, such as individual student achievement and attitudes, is perhaps indicated these results (even when the "individual" measures are reduced to group means).

The sub-hypothesis which predicted functional relationships between external determinants (community variables, student preferences, and faculty preferences) and the nine output indices was also not confirmed. In the multiple regression analyses and the correlation matrix reported in Table V-2, it is observed that individual variables are related but no statistically significant canonical correlations are found between the battery of external determinants and the battery of output indices.

These results are somewhat surprising for at least two reasons. First, a substantial amount of research has shown that, in general, college output is largely determined by the quantity and quality of input, especially in terms of student characteristics. Second, a substantial amount of literature describes the junior college, especially the comprehensive public community junior college, as an educational institution that is highly responsive to the needs and characteristics of its local community. Therefore, one would be led to expect relatively strong relationships between the external determinant battery and the output indices.

The external determinants are, however, functionally related to the environments of the colleges, which then are related to the attitudinal criterion measures. The college environments can perhaps be regarded as mediating variables, since they are, to various degrees, related to the external determinants (see discussion of Table V-3). It was shown that the characteristics of students and faculty (in terms of the type of college they prefer) are strongly related to the college environments. The environmental dimensions, however, are defined only in part by items that refer specifically to the characteristics and behaviors of students and faculty members. Therefore, assuming causality for purposes of illustration, it might be more appropriate to restrict the conceptualization of external determinants to "external determinants of college environments" rather than a broader definition which implies direct relationships with criterion measures. Further analysis should be performed to indicate to what extent the external determinants are independently or residually related to the criterion measures, after their "contribution" to the determination of the Junior College Environment Scales is taken into consideration. The regression analyses provide partial evidence which indicates that only minimal relationships might exist.

Another explanation for this unconfirmed hypothesis, is that the public junior college is not as community-related as the literature indicates. This could be attribued, if true, to a general lack of concern or indifference for such relationships by those working in the colleges. A more likely explanation, however, is probably the differing definitions of what constitutes "relatedness" between the community and the college, and differing values placed upon these definitions. For example, two colleges that are located in hypothetically identical communities might respond to the community characteristics in different ways. One college located in a "poverty" area, might in effect respond by saying: "What these people need are basic educational skills." Another college in the same type of community might respond by saying, in effect: "What these people need are vocational and occupational training." This example, among many similar ones that might be given, would emphasize strongly the importance of the staff members in the college, especially the faculty, and their attitudes. Another example of differing responses to the same community characteristics might find that one college, through admission and placement procedures, effectively limits its student body to only certain portions of the potential student-body. Another college, using different admission and placement procedures (or being truly an "open door college" and not having any admission or placement procedures) would have an entirely different type of student-body from the same community. This line of reasoning, if valid, could serve to explain the general lack of relationships between community characteristics and output indices, and the relatively strong influence between faculty and student characteristics and measures of junior college environments.

It must be concluded, however, that there is sufficient support for the three major hypotheses to allow them to serve as "guidelines" for these junior college staff members responsible for decisions that involve the selection of objectives, the determination of relative values to be placed upon these objectives, and conducting operations designed to attain these objectives. Based upon the functional relationships demonstrated among the various batteries, the relatively greater importance of junior college environments upon the criterion measures (even the output indices which were less strongly related) would indicate that any "educational engineering" or other activities designed to effect changes in the extent to which various criterion measures are achieved, should at least consider if not begin by examining the environment.

Two major implications for any such engineering are strongly indicated. First, the Junior College Environment Scales, both individually and in various patterns, are not always related positively with the generally more desirable directions on the criterion measures. For example, if one wishes to assume causality and raise the scores on a particular measure in a college, or change the scores on two or more of the environmental measures to create a certain environmental pattern, this can be expected to cause some of the criterion measures to move in desirable directions and others to move in less desirable directions. This implies that the relative importance assigned different criterion measures, by different participants in the college organization (students, faculty, administrators, public) must be taken into consideration at the time the objectives are specified. This also implies that greater specificity in describing the objectives so that at least the nature of an objective can be agreed upon by various persons (even if the values accorded that objective must differ).

Second, the Junior College Environment Scales must be considered as "descriptions of symptoms" by anyone considering taking action to deliberatly change the relative strength of one of the dimensions or a combination of them. That is, making relatively superficial changes in the college and relying upon the item content to suggest or determine these changes, would probably not result in any "real" changes in the environments. The best that could be hoped for would be temporary changes. To continue this medical analogy (which like all analogies can be useful only within rather restricted limits), if one wishes to change the environmental press within a particular college probing attempts to uncover the underlying causes or bases of an environment would be required. For further discussion concerning changes in environments see Pace (1966a, 1967a).

## Summary

This chapter has analyzed and discussed the results of the study. The data was examined by both canonical analysis and a multiple regression analyses. Seven canonical analyses were performed to estimate the relationships between external determinants, environment measures, and criterion measures. Only five of these analyses resulted in one or more statistically significant dimensions between the external determinants (community characteristics, faculty preferences and student preferences) and the four Junior College Environment Scales. The students who prefer a higher degree of sociability faculty members who tend not to prefer socially as opposed to academically oriented students and a community that is not suburban in nature at one end of the continuum. The appearance of Conventional Conformity with sociability, reinforces the description of the Conventional Conformity dimension, that is, the norms which are "conformed to" in this context emphasize participation in the "social life" of the campus. The presence of both student preference for sociability and faculty members who do not prefer students with this orientation (or the opposite relationship at the other end of the vector) suggests such student motivation may create a negative reaction against it on the part of the faculty because these student preferences usually conflict with the formal educational process. However, the correspondence of greater preference by faculty members for more sociable students with greater suburban characteristics in the community suggest that the greater social interaction in suburban areas, as opposed to urban, produces a greater preference on the part of the faculty for an emphasis upon more sociable activities.

The second dimension was characterized by the presence of Conventional Conformity, Internalization, communities with a larger number of people possessing higher education, and a preference for a liberal arts education by faculty at one end of the continuum. This suggests that convention, as represented by community norms, can also dictate conformity to and internalization of success values within the college community. The negative relationships between maturation and these variables however, implies conflict or stress, that is. we find colleges and communities which stress achievement and success but de-emphasize individuality, maturity, responsibility, etc.

The next canonical analysis indicated that common dimensions between the external determinants and measures of student satisfaction and achievement. Three dimensions appeared. The first dimension was characterized by higher social class, but lower income and a smaller proportion of the population with higher education at the positive end of the dimension. Associated with this is less success in finding congenial groups, adjusting to expected behavior, but more success in getting things done. These loadings imply communities which are populated by persons employed in semi-professions and clerical occupations. Such middle class communities would likely place high emphasis upon achievement and upward-mobility (as indicated by the positive correlation of "getting things done" with these factors) and de-emphasize the"social" aspects of the campus.

The second dimension of this set was the same as the first one with the addition of another item indicating that students generally accept the community norms of "getting ahead." Again, the third dimension describes middle class "success" motivation. More specifically, people in urban areas seem to be stressing preprofessional education as opposed to vocational training.

Another canonical analyses describes the relationships between the external determinants and student participation in various activities. The positive pole of the first dimension indicates fewer suburban characteristics, more participation in religious groups but less visiting of art galleries and museums. One could surmise that this dimension describes communities that are probably small with somewhat fundamentalist religious interest as opposed to suburban communities with more liberal arts,asthetic and religious concerns.

The second dimension in this set finds communities that are less suburban in character, have higher income, less preference for Liberal Arts related programs and students who exhibit less interest in Sociability at one end of the continuum. Associated with this is greater participation in student government and sports activities as spectators. Thus it seems small, wealthy communities encourage the more formal traditional aspects of student activities.

In the last dimension of this set, a relatively well educated, lower class population in urban areas was related to participation in religious groups, visiting art galleries and museums but less activity in attending lectures. Here again we probably see the aspirations of a rising lower class reflected in the more""cultural" but not quite intellectual pursuit on the college campus.

The final two canonical analyses were concerned with the relationships between college environments and criterion measures. The first of these analyzed the associations between the four measures of Junior College Environments and the 19 items indicative of student satisfaction and judged achievement. Three significant dimensions appeared. The first dimension was characterized at its positive pole by greater Internalization, Humanism and low Conventional Conformity and general satisfaction with the college, less success in finding congenial groups, less success in adjusting to expected behavior and success in developing an appreciation of art, music and literature. This dimension was interpreted as describing colleges which emphasize knowledge and humanistic and cultural awareness as opposed to social and interpersonal concerns. Similiar but inverse loadings on the second dimension in this set lead to the conclusion that this dimeniion described a college that emphasizes interpersonal relations, participation in groups and "belonging", that is, person-orientedness as opposed to object or subject matter orientedness. Loadings on the last dimension indicate emphasis versus one of individual achievement, independence, and concern with ideas.

The last canonical analysis examined the correlations between Junior College Environment Scales and reported participation in student activities. The first dimension which appeared from this analysis found greater Conventional Conformity and less Humanism to be associated with greater reported participation in sports events as a spectator and in hobby groups but less participation in activities such as visiting art galleries and museums. This dimension was interpreted as describing a college in which there is interest in groups activities, social interactions, generally directed toward non-aesthetically oriented participation. The second dimension of this set found an environment stressing "Maturation" to be related (as one can logically assume) to individual activities (as opposed to group activities) such as student government. The third and final dimension of this set defined a college which emphasizes participation in areas that are intrinsically rewarding to individuals (service groups, art galleries) as opposed to activities rewarding to groups as a whole (social and religious groups).

The regression analyses are summarized in the following paragraphs by listing, for each independent variable (13 community factors, 2 faculty preference scales, 2 student preference scales, and 4 environment scales) the dependent variables (9 output indices and 35 attitudinal items) with which it is significantly related in a regression equation. In many instances only one direction of relationship is indicated (such as higher Internalization is associated with more participation in academic groups and clubs) and the opposite relationship must be supplied by the reader.

The first independent variable (C1) social Class, is positively related to employment in a position related to occupational programs, and negatively related to visiting art galleries, museums, etc. The following set of items which deal with educational goals a student may feel he is attaining were also positively related with social class: (1) getting things done, (2) ability to write, speak, and communicate effectively, (3) obtaining background for further education, (4) acquiring an appreciation of ideas, and (5) understanding major social issues and problems. Higher Education (C2) is negatively associated with reported achievement in getting things done and appreciation of ideas while participation in religious groups and attending plays and concerts are positively associated with this variable, Factor C3, Mobility, is positively related to percentage of enrollment in occupational programs and felt ability to get things done. Mobility was also found to be related to percentage of those transfering that get B.A. degrees and judgements of achievement in problem solving skills. The percentage of married individuals in a given unit area, (C4) is positively related to finding congenial groups, participation in varsity sports, and judgments of getting things done, obtaining functional occupational training, obtaining a background for further education, learning to define and solve problems, obtaining knowledge of modern technology, and developing an appreciation of ideas. Satisfaction with the college, liking the college, finding congenial groups, judgments of success in occupational training applicable to a job and participation in student government are negatively associated with economic, racial discrimination (C5). Getting along with others is positively related to this factor as is the BA Index. Positive relationships exist between getting along with others, knowing accepted rules, achieving ability to think critically, learning to appreciate good ideas and industrial Unionization, (C6). Industrial Unionization was also positively correlated with the number of studenss who complete the associate of arts degree. The seventh independent variable, Housing Imbalance (C7), is related to less satisfaction with the college and less achievement in getting along with others. This variable is negatively correlated with the BA Index, but is related to greater success in acquiring a background for furher education and participation in varsity athletics and student government.

The Young Families variable (C8) was found to be negatively correlated to degree of satisfaction with college and felt ability to write and speak effectively. Judgments of achievement in working effectively with groups, learning to define and solve problems, obtaining an appreciation of ideas, acquiring an understanding of issues and problems and participation in social groups and visiting art galleries and museums are all positively related with the more independent areas (C9). Large Farms was associated with less indicated achievement in finding congenial groups and less participation in intramural sports and social groups. This variable was associated positively with satisfaction with the college and attendance at sports events as spectator. Consumption (C11) was positively associated with number of students placed on academic probation and dismissed from college, but with lower judgments of ability to get along with others, and less participation in religious and debating groups. This variable was associated with lower achievement in obtaining a background for further education and developing an appreciation of arts, music, and literature. Lower reported achievement in obtaining a background for further education, learning to define and solve problems, gaining an appreciation of ideas, developing an understanding of issues and problems, cultivating an appreciation of art, music and literature and less participation in academic clubs, and less attendance at concerts and lectures are all associated with higher Income (C12). Urbanization (C13) is related to decreased success in finding congenial groups in the college.

Scale F1, Students, is related to decreased participation in academic clubs and increased participation in religious groups. Faculty Liberal Arts preferences (F2) were related to increased attendance at plays and lectures and decreased achievement in appreciation of and knowledge about modern technology. (High scores on the F1 scale indicate preference for "good" students and low scores on the F2 scale indicate preference for Liberal Arts.)

Student preferences for Scholarship and Intellectual Environment (S1) is related to fewer students employed in jobs relevant to occupational training, but more success in finding congenial groups on campus, getting along with others, learning to work with groups and individuals, adjusting to expected behavior, and acquiring knowledge of accepted rules. Low scores on this scale (a preference for scholarship and intellectual environment) are associated with fewer students who transfer to senior institutions but with greater participation in varsity athletics. Greater preferences for Sociability (S2) (lower scores) are related to increased achievement in acquiring skills and techniques directly applicable to a job, developing an appreciation of science, greater participation in varsity athletics, intramural sports, music organization, dramatics, religious groups, hobby groups, debating groups, attending lectures, and working on school publications. This dimension was negatively related to the number of students employed in jobs relevant to occupational training (less sociable preferences relating to fewer employed), and increased understanding of issues and problems.

The Conventional Conformity scale (E1) of the JCES instrument is positively correlated with percentage of enrollment in transfer programs. This subscale is associated with increased satisfaction with and liking of the college, greater success in finding congenial groups on campus, learning how to get things done, learning to work effectively with groups and individuals, adjusting to expected behavior, obtaining knowledge of accepted rules, getting along with others, obtaining knowledge of modern technology, and increased participation in varsity athletics, intramural sports, student government, religious groups, academic clubs, social groups, service groups and attending sports events.

The Internalization scale (E2) is positively associated with decreased visiting of art galleries and museums. This subscale was negatively related to proportion earning the AA degree, the proportion of students who transfer to senior institutions, but increased satisfaction with the college, greater liking of the college, more achievement in adjusting to expected behavior, gaining an appreciation of ideas, developing and understanding of issues and problems, cultivating an appreciation of art, music and literature, participating in academic clubs, attending sports events, visiting art galleries and museums and attending lectures.

The Maturation scale (E3) is associated with decreased achievement in learning about and appreciating modern technology. Participation in varsity sports, academic clubs, social groups, debating groups, visiting art galleries and museums, and attending sports events is also less prevalent in high scoring colleges. This subscale is negatively related to completing the AA degree, percentage of students enrolled in occupational programs, but associated with greater satisfaction with the college, liking of the college, success in learning to write and speak effectively, acquiring a background for further study, learning to define and solve problems, developing an interest in reading and learning, acquiring an appreciation of ideas, and cultivating an appreciation of art, music and literature.

The last JCES scale, Humanism (E4) is positively related to decreased achievement in learning to work effectively with groups and individuals, obtaining skills and techniques applicable to a job, adjusting to expected behavior and obtaining knowledge of rules. This is related to greater liking of the college, and more success in acquiring an appreciation of science and developing an interest in reading and learning, and increased participation in academic and debating groups, and attendance at lectures.

Further analyses which entertain the possibilities of interactions among variables and non-monotonic relationships are beyond the scope of this study but might serve to explain the results, particularly the conflicting effects of the JCES with output indices, satisfaction, achievement and student activity.

# Chapter VI

## Summary

From the population of public junior colleges identified in the 1963 Junior College Directory (American Association of Junior Colleges, 1964), a representative sample of 100 colleges was selected. Colleges that did not have enrollments listed for the fall semester, 1962, were deleted from the population. To select the sample, the United States was divided into six regions. Within each region the colleges were further categorized according to enrollment as above or below the national media. Within each of these twelve classifications, colleges were selected so that the resulting sample was as proportional (to the population) as possible on the following criteria: (1) Accreditation source, (2) Presence or absence of evening programs, (3) Presence or absence of student housing, (4) Curriculum types offered, (5) Ratio of full-time to part-time enrollments.

Three categories of information were gathered for each oollege. These were external determinants of the college environment, internal determinants of the college environment, and a variety of criterion measures. These three categories of variables, and the nature of each category is described in the following paragraphs.

The three subsets of variables referred to as external determinants are community characteristics, student preferences for environmental dimension, and faculty preferences for environmental dimension.

In order to formulate a number of community dimensions believed functionally related to the nature of junior college environments and a variety of criterion variables, seventy-two items of data dealing with the social, economic and demographic characteristics of the community were collected for each junior college district and/or service area. These data were then subjected to factor analysis. The dimensions which appeared were further analyzed for the purpose of selecting those dimensions which were best delineated by the variables and most theoretically relevant to the study. By this process, thirteen dimensions were selected.

One of the most important community dimensions which was selected for this study measures social class. Income, education and occupation, which are three social structural variables generally taken as operational definitions of social class, were significantly correlated with this factor. Another dimension indicated, more specifically, the distribution of educational level of people from a given unit area.

Two relevant communal factors related to the population distribution of a unit area were labeled mobility and housing imbalance. The mobility dimension describes a region in which many individuals are to varying extents committed to local occupational or social groups or generally "on the move". The presence of both a number of vacant housing units and crowded housing in the same area (at the positive end of the factor) suggests that the second factor describes a unit area in which one finds a disproportion between available houses and occupancy.

Two particular aspects of the economic organization of a unit area are presented in two other factors. Racial discrimination with respect to occupational opportunities is measured by one dimension since education of non-white was negatively correlated and occupational status was positively correlated with this factor. A second dimension indicates the degree of industrial unionization existing within a given area. This interpretation results from the positive correlations with the factor of both level of wages and percentage of laborers in a given unit area.

The general nature of the communal structure of a given area is indicated by two other factors. One dimension describes suburban area characteristics. A fairly large population, the presence of farm lands, high income families, a high education level, and conservative values characterize the region measured by this dimension. The high loadings of percentage non-white, ratio of rental to owned housing units, trade and population density on the other factor of this set definitely indicates that urban area characteristics are being measured.

Another dimension dealing with rural areas measures farm size. Not only is average farm size significantly correlated with this factor but two other variables connoting large farms were also significantly correlated. These two were average farm value and average dollars spent per farm on hired labor.

Two factors identified for use in this study deal with the monetary process of a given unit area. The first dimension in this set measures the amount of goods and services purchased (Consumption) in a given region. All the retail trade items loaded significantly on this factor. The second factor measures the amount of income possessed by families. Along with most of the income categories, farm value, retail trade and home value were significantly correlated with this dimension.

The marital status of people of a given unit area and the age characteristics of families of an area are represented by two other factors. Six categories of marital status (such as percent of females widowed and divorced, and percent married individuals) were correlated with the marital status factor. Another factor in the positive direction, describes a unit area in which there is a number of young families. Positive correlations of the younger age categories and negative correlations of the widowed and divorced classification with this dimension further reinforce this interpretation.

The next set of external factors which obtained by factor analysis concerned student preferences for different aspects of the college environment. Two basic dimensions appeared: (1) Scholarship and Intellectual Environment and (2) Sociability.

The Scholarship and Intellectual Environment dimension indicates a serious concern on the part of the students in assimilating knowledge. More specifically, this factor measures the desired conditions within the college that they evidently view as making this endeavor possible. Students prefer enlightened and knowledgable instructors who are interested in communicating their ideas to the students, a chance to actively participate in the learning process, and opportunities for independent thinking - free from the conventional bounds of the community. A subset of items in this dimension indicates that these objectives are achieved by a network of social bonds that unite members of the college community.

The Sociability dimension pertains to student relationships and activities. This dimension contains two covarying subsets of items. Serious and purposeful activities directed towards scholarly goals characterize the items defining one aspect of this dimension. Another subset of items describes phenomena which might be called "academic irresponsibility." These social activities desired by the students indicate a general lack of involvement in the academic community and therefore an absence of motivation to develop ones's maximum capabilities in a given area of study.

Two basic dimensions appear to account for the preferences faculty members express. The first of these dimensions is concerned primarily with the nature of the student body. In general, faculty members appear to not prefer students that are not interested in the basic business of the college, i.e., academic achievement. Students interested primarily in social activities, especially of more frivolous, non-constructive varieties, are also not desired. Although no items describing the opposite or preferred end of this dimension appeared in the analysis, such characteristics may be inferred. In general, faculty members would evidently prefer intelligent, serious, purposeful, dedicated, goal oriented students, as opposed to those previously described.

The second scale appears to describe a liberal arts dimension. The sterotyped picture of the small, selective, intellectually active liberal arts college is located at the preferred end of this dimension. Involvement and concern in social and cultural issues and problems are characteristics of the college community in general. Friendly individual and group interactions are indicated between and among faculty members and students.

The battery of internal determinants, consisted of student reports of the college environmenment. To secure measurements of the actual environments in the colleges, the Junior College Environment questionaire was administared to students at 95 colleges. The responses to the 300 items constituting this instrument were then factor analyzed. Four main dimensions appeared. The first scale (Conventional Conformity) describes a campus community resembling Tonnies' Gemeinschaft society. Life on the campus is governed by a number of well-established standards and ideals which create a disciplined and traditional social structure. The second scale (Internalization) defines a college which stresses the awareness of issues and problems of the day. The main object of such stimulation, however, is not to have students obtain knowledge for the sake of just being "knowledgeable," but to develop practical, and concrete ideas which will facilitate present and future adjustment to the everyday world. The third scale (Maturation) describes a college which definitely serves the function of developing self-direction in their students. Environmental presses emphasize independent and logical reasoning in order to develop internal motivation and direction toward practical ends. The last scale (Humanism) describes a student body interested in discussing, sharing and debating ideas and theories of philosophy, politics, music, theology, etc., largely outside of the classroom. Although this connotes a cohesiveness among students with respect to academic activities, frequent interpersonal relations among students with respect to social activities (parties, sports events, etc.) do not exist.

The criterion measures used in the final analyses are of two general types. The first describes the "output" of the college and the second the academic attitudes of the students concerning satisfaction with the college, the extent to which they feel they are achieving certain goals, and their reported participation in student activities.

The "output" measures describe the extent to which the colleges return "processed commodities" to the larger community, that is, what the college is doing with its students and what happened to them. Since a number of variables must be taken into account in order to obtain a valid evaluation of the achievement of junior colleges, a number of output indices were used. The first five output indices directly describe the quality of the job done by the colleges for a particular group of students such as rate of degree attainment and the extent to which students complete occupational programs. Other measures describe the attrition resulting from the educational process, e.g., number of students placed on academic probation and rate of dismissals and of rejected admission requests. A final pair of indices describes the two major types of "student processing" that occur in the public junior college, e.g., percentage of enrollment in occupational programs and percentage of enrollment in transfer programs

The second variety of criterion measures, which describe the evaluative attitudes of the students towards the college, consists of two sets of items. The first set are indices of the extent to which students are satisfied with the college and feel they are making progress toward a number of generally accepted educational goals. A final set of items measured the extent to which students participated in various types of campus activities.

Seven canonical analyses were performed to estimate the relationships between external determinants, environment measures, and criterion measures. Only five of these analyses resulted in one or more statistically significant canonical correlations.

One of these analyses indicated that there were two significant dimensions between the external determinants (community characteristics, faculty preferences, and student preferences) and the four Junior College Environment Scales. The first vector found colleges which exhibit high scores for Conventional Conformity, students who prefer a higher degree of Sociability, faculty members who tend not to prefer socially as opposed to academically oriented students and a community that is not suburban in nature at one end of the continuum. The appearance of Conventional Conformity with Sociability reinforces the description of the Conventional Conformity dimension, that is, the norms which are "conformed to" in this context emphasize participation in the "social life" of the campus. The presence of both student preference for sociability and faculty members who do not prefer students with this orientation (or the opposite relationship at the other end of the vector) suggests such student motivation may create a negative reaction against it on the part of the faculty because these student preferences usually conflict with the formal educational process. However, the correspondence of greater preference by faculty members for more sociable students with greater suburban characteristics in the community suggests that the greater social interaction in suburban areas, as opposed to urban, produces a greater preference on the part of the faculty for an emphasis upon more sociable activities.

The second dimension was characterized by the presence of Conventional Conformity, Internalization, communities with a larger number of people possessing higher education, and a preference for a liberal arts education by faculty at one end of the continuum. This suggests that convention, as represented by community norms, can also dictate conformity to and internalization of success values within the college community. The negative relationships between maturation and these variables, however, implies conflict or stress, that is, we find colleges and communities which stress achievement and success but de-emphasize individuality, maturity, responsibility, etc.

The next canonical analysis indicated the common dimensions between the external determinants and measures of student satisfaction and achievement. Three dimensions appeared. The first dimension was characterized by higher social class, but lower income and a smaller proportion of the population with higher education at the positive end of the dimension. Associated with this is less success in finding congenial groups, adjusting to expected behavior, but more success in getting things done. These loadings imply communities which are populated by persons employed in semi-professions and clerical occupations. Such middle class communities would likely place high emphasis upon achievement and upward-mobility (as indicated by the positive correlation of "getting things done" with these factors) and de-emphasize the "social" aspects of the campus.

The second dimension of this set was the same as the first one with the addition of another item indicating that students generally accept the community norms of "getting ahead." Again, the third dimension describes middle class "success" motivation. More specifically, people in urban areas seem to be stressing preprofessional education as opposed to vocational training.

Another canonical analysis described the relationships between the external determinants and student participation in various activities. The positive pole of the first dimension indicates fewer suburban characteristics, more participation in religious groups but less visiting of art galleries and museums. One could surmise that this dimension describes communities that are probably small with somewhat fundamentalist religious interest as opposed to suburban communities with more liberal aesthetic and religious concerns.

The second dimension in this set finds communities that are less suburban in character, higher income, less preference for Liberal Arts related programs and students who exhibit less interest in sociability at one end of the continuum. Associated with this is greater participation in student government and sports activities as spectators. Thus it seems small, wealthy communities encourage the more formal traditional aspects of student activities.

In the last dimension of this set, a relatively well educated, lower class population in urban areas was related to participation in religious groups, visiting art galleries and museums but less activity in attending lectures. Here again we probably see the aspirations of a rising lower class reflected in the more "cultural" but not quite intellectual pursuits on the college campus.

The final two canonical analyses were concerned with the relationships between college environments and criterion measures. The first of these analyzed the associations between the four measures of Junior College Environments and the 19 items indicative of student satisfaction and judged achievement. Three significant dimensions appeared. The first dimension was characterized at its positive pole by greater Internalization, Humanism and low Conventional Conformity and general satisfaction with the college, less success in finding congenial groups, less success in adjusting to expected behavior and success in developing an appreciation of art, music and literature. This dimension was interpreted as describing colleges which emphasize knowledge and humanistic and cultural awareness as opposed to social and interpersonal concerns. Similar but inverse loadings on the second dimension in this set lead to the conclusion that this dimension described a college that emphasizes interpersonal relations, participation in groups and "belonging", that is, person-orientedness as opposed to object or subject matter orientedness. Loadings on the last dimension indicate that that dimension describes a college promoting an occupational or practical emphasis versus one of individual achievement, independence, and concern with ideas.

The last canonical analysis examined the correlations between Junior College Environment Scales and reported participation in student activities. The first dimension which appeared from this analysis found greater Conventional Conformity and less Humanism to be associated with greater reported participation in sports events as a spectator and in hobby groups but less participation in activities such as visiting art galleries and museums. This dimension was interpreted as describing a college in which there is interest in group activities and social interactions, generally directed toward non-aesthetically oriented participation. The second dimension of this set found an environment stressing "Maturation" to be related (as one can logically assume) to individual activities (as opposed to group activities) such as student government. The third and final dimension of this set defined a college which emphasized participation in areas that are intrinsically rewarding to individuals (service groups, art galleries) as opposed to activities rewarding to groups as a whole (social and religious groups).

The regression analyses are summarized in the following paragraphs by listing, for each independent variable (13 community factors, 2 faculty preference scales, 2 student preference scales, and 4 environment scales) the dependent variables (9 output indices and 35 attitudinal items) with which it is significantly related in a regression equation. In many instances only one direction of relationship is indicated (such as higher Internalization is associated with more participation in academic groups and clubs) and the opposite relationship must be supplied by the reader.

The first independent variable, (C1), social Class, is positively related to employment in a position related to occupational programs, and negatively related to visiting art galleries, museums, etc. The following set of items which deals with educational goals a student may feel he is attaining were also positively related with social class: (1) getting things done, (2) ability to write, speak, and communicate effectively, (3) obtaining background for further education, (4) acquiring an appreciation of ideas, and (5) understanding major social issues and problems. Higher Education (C2) is negatively associated with reported achievement in getting things done and appreciation of ideas while participation in religious groups and attending plays and concerts are positively associated with this variable. Factor C3, Mobility, is positively related to percentage of enrollment in occupational programs and felt ability to get things done. Mobility is also found to be inversely related to percentage of those transfering that obtain B.A. degrees and judgments of achievement in problem solving skills. The percentage of married individuals in a given unit area, (C4), is positively related to finding congenial groups, participation in varsity sports, and judgments of getting things done, obtaining functional occupational training, obtaining a background for further education, learning to define and solve problems, obtaining knowledge of modern technology, and developing an appreciation of ideas. Satisfaction with the college, liking the college, finding congenial groups, judgments of success in occupational training applicable to a job and participation in student government are negatively associated with economic, social discrimination (C5). Getting along with others is positively related to this factor as is the BA Index. Positive relationships exist between getting along with others, knowing accepted rules, achieving ability to think critically, learning to appreciate good ideas and Industrial Unionization (C6). Industrial Unionization was also positively correlated with the number of students who complete the associate of arts degree. The seventh independent variable, Housing Imbalance (C7) is related to less satisfaction with the college and less achievement in getting along with others. This variable is negatively correlated with the BA Index, but is related to greater success in acquiring a background for further education and participation in varsity athletics and student government. The Young Families variable (C8) was found to be negatively correlated to degree of satisfaction with college and felt ability to write and speak effectively. Judgments of achievement in working effectively with groups, learning to define and solve problems, obtaining an appreciation of ideas, acquiring an understanding of issues and problems and participating in social groups and visiting art galleries and museums are all positively related with the more independent suburban-like areas (C9). Large Farms (C10) was associated with less indicated achievement in genial groups and less participation in intramural sports and social groups. This variable was associated positively with satisfaction with the college and attendance at sports events as spectator. Consumption (C11) was positively associated with number of students placed on academic probation and dismissed from college, but with lower judgments of ability to get along with others, and less participation in religious and debating groups. This variable was associated with lower achievement in obtaining a background for further education and developing an appreciation of arts, music, and literature. Lower reported achievement in obtaining a background for further education, learning to define and solve problems, gaining an appreciation of ideas, developing an understanding of issues and problems, cultivating an appreciation of art, music and literature and less participation an academic clubs, and less attendance at concerts and lectures are all associated with higher Income (C12). Urbanization (C13) is related to decreased success in finding congenial groups in the college.

Scale F1, Students, is related to decreased participation in academic clubs and increased participation in religious groups. Faculty Liberal Arts preferences (F2) were related to increased attendance at plays and lectures and decreased achievement in appreciation of and knowledge about modern technology. (High scores on the F1 scale indicate preference for "good" students and low scores on the F2 scale indicate preference for Liberal Arts.)

Student preferences for Scholarship and Intellectual Environment, (S1), is related to fewer students employed in jobs relevant to occupational training, but more success in finding congenial groups on campus, getting along with others, learning to work with groups and individuals, adjusting to expected behavior, and acquiring knowledge of accepted rules. Low scores on this scale (a preference for scholarship and intellectual environment) are associated with fewer students who transfer to senior institutions but with greater participation in varsity athletics. Greater preferences for Sociability (S2) (lower scores), are related to increased achievement in acquiring skills and techniques directly applicable to a job, developing an appreciation of science, greater participation in varisity athletics, intramural sports, music organization, dramatics, religious groups, hobby groups, debating groups, attending lectures, and working on school publications. This dimension was negatively related to the number of students employed in jobs relevant to occupational training (less sociable preferences relating to fewer employed), and increased understanding of issues and problems.

The Conventional Conformity scale (E1) of the JCES instrument is positively correlated with percentage of enrollment in transfer programs. This subscale is associated with increased satisfaction with and liking of the college greater success in finding congenial groups on campus, learning how to get things done, learning to work effectively with groups and individuals, adjusting to expected behavior, obtaining knowledge of accepted rules, getting along with others, obtaining knowledge of modern technology, and increased participation in varsity athletics, intramural sports, student government, religious groups, academic clubs, social groups, service groups and attending sports events.

The Internalization scale (E2) is positively associated with decreased visiting of art galleries and museums. This subscale was negatively related to proportion earning the AA degree, the proportion of students who transfer to senior instituions, but increased satisfaction with the college, greater liking of the college, more achievement in adjusting to expected behavior, gaining appreciation of ideas, developing and understanding of issues and problems, cultivating an appreciation of art, music and literature, participating in academic clubs, attending sports events, visiting art galleries and museums and attending lectures.

The Maturation scale (E3) is associated with decreased achievement in learning about and appreciating modern technology. Participation in varsity sports, academic clubs, social groups, debating groups, visiting art galleries and museums, and attending sports events is also less prevalent in high scoring colleges. This subscale is negatively related to completing the AA degree, percentage of students enrolled in occupational programs, but associated with greater satisfaction with the college, liking of the college, success in learning to write and speak effectively, acquiring a background for further study, learning to define and solve problems, developing an interest in reading and learning, acquiring an appreciation of ideas, and cultivating an appreciation of art, music and literature.

The last JCES scale, Humanism,(E4) is positively related to decreased achievement in learning to work effectively with groups and individuals, obtaining skills and techniques applicable to a job, adjusting to expected behavior and obtaining knowledge of rules. This is related to greater liking of the college, and more success in acquiring an appreciation of science and developing an interest in reading and learning, and increased participation in academic and debating groups, and attendance at lectures.

Further analyses which entertain the possibilities of interactions among variables and non-monotonic relationships are beyond the scope of this study but might serve to explain the results, particularly the conflicting effects of the JCES with output indices, satisfaction, achievement and student activity.

Sufficient evidence is provided to indicate that some consideration of Junior College Environment Scales, by staff members of public junior colleges, would be worthwhile. However, anyone interested in manipulating college environments must also develop techniques for specifying the objectives of such changes estimating the relative efficiency of certain environments as they might effect the objectives, and measuring the relative value of the objectives. It was easily observed that any environmental pattern tends to increase the likelihood of certain objectives being achieved but decreases the likelihood of others being achieved. Therefore, the "educational engineer" must have some analytical tools available which permit him to identify the best "compromise" in any given situation.

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## Appendix A

## Sample Selection

Each of the 396 public junior colleges in existence in the continental United States since 1962[1] was classified on seven variables which might, theoretically, be related to differences in college atmosphere and/or output. The two major variables were geographic location and student body size. The United States was divided into six geographic regions. (see Table A1) These regions were similar to those used in other studies (Knoell and Medsker, 1964a, 1964b; Raines, 1965) and were selected using similar criteria. In general, the regions were selected so that (1) no single state dominated a region in number of colleges (primarily for this reason California was made a separate region), (2) the colleges were fairly evenly distributed among the regions, and (3) the regions contained geographically, economically, etc., similar areas, i.e., the regions were similar to those generally used by economists, sociologists, etc.

Schools within each region were divided into two enrollment size groups at the national enrollment median. The national enrollment median was determined by using the total enrollment, October 1963, as published in the 1964 Junior College Directory.

Within the twelve cells thus formed, the colleges were classified on five minor variables (source accreditation, presence or absence of boarding facilities, presence or absence of evening classes, type of curriculum offered, and ratio of part-time to full-time students). The distribution of colleges on these seven variables is given in Table A2. The 95 college sample was used in the preliminary analysis of the JCES (See Appendix E). The 100 college sample was used for all other analyses.

The actual sample of colleges used was acquired according to the following procedure. (1) The states within each cell were arranged alphabatically. Within each state the colleges were arranged alphabetically. (2) Within each cell, every fourth college was chosen for the working sample. (3) The frequency of each of the minor variables within the working sample from each cell was tabulated and comparison made to the theoretical distribution for the sample. Any discrepancies were corrected by replacing one of the colleges in the working sample with one from those remaining in the cell which came closer to matching the theoretical distribution. The necessary changes were made with as few replacements as possible. (4) Simultaneously, schools with fewer than 200 students were replaced, since the minimum of 200 students was necessary to potentially permit the information required for the study to be gathered. (5) When it was impossible to match the theoretical distribution exactly, schools were chosen which allowed the fewest and least areas of discrepancy. The colleges chosen by these procedures formed the first group, which was invited to participate in the study.

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[1] J. C. Directory, 1964. It should be noted that when the original listing of junior colleges was compiled there were 398 according to the directory. However, subsequently it was learned that two of the schools included in the directory had since then become four-year institutions, thus reducing the number of available junior colleges to 396.

To replace colleges which rejected the invitation, a second group of schools was chosen. This was done by selecting each school (within a cell) in turn. If the theoretical sample still called for the characteristic of that school, it was selected. This continued until the needed number of colleges was selected. A third invitation was required to complete the sample. For this, the same procedure was followed, beginning with the college at which the second selection ended, i.e., the college following the last one selected for the second invitation list. However, for the third invitation, more colleges were invited than were needed, based on the previous rejection rate for the cell, in order to obtain all the colleges needed with just this final invitation.

To determine the quality of the actual sample a chi square "goodness of fit" test was run on the actual samples against theoretical samples of the same size. A similar test was also run on the actual sample against schools which either rejected or did not respond to the invitation to participate in this study.

The colleges were selected to be as representative as possible of the public junior colleges in the United States. Seven stratification variables were considered. In general the samples correspond quite closely with a theoretical sample of the same size. For both samples differences between the actual and theoretical samples were found in connection with curriculum types. A larger proportion of the samples have both terminal and transfer curricula as opposed to transfer only or terminal only. Another consistent difference between theoretical and actual sample occured for boarding facilities. A greater proportion of colleges in both samples have boarding facilities for students than is found in the total population. A relatively large difference is found for whether or not the colleges have evening programs. A greater proportion of the colleges have evening programs than would be indicated by a strictly proportional sample. These indicated differences between actual and theoretical samples produced $X^2$'s significant at the 5 percent level but not at the 1 percent level.

As examination of Table A2 will indicate, these discrepancies occured in the last "iteration" in selecting the sample. These differences occur on the five minor stratification variables that are least likely to effect the environment. In connection with evening programs and curriculum differences, the differences reflect trends that are observable in the development of the community college. A greater proportion of colleges tend to have evening programs and comprehensive curricula. Although no evidence exists to indicate the trend with regard to boarding facilities, it is likely that an increasingly greater proportion of public junior colleges have established boarding facilities and will continue to do so in the future. This phenomena primarily occurs in regions that are not heavily populated but have developed state-wide plans for community colleges. Arizona, California (excluding the San Francisco and Los Angeles areas) Texas, Michigan, and New York are examples.

As Table A3 indicates there is no real difference between the colleges accepting the invitation and subsequently being selected for the sample and those either rejecting or not responding to the invitation. The only variables to differ significantly at the .05 level were presence or absence of evening classes and source of accreditation. In general, no grave discrepancies were detected among the actual sample, theoretical sample and those colleges rejecting or not responding to the invitation.

Table A4 identifies the 100 participating colleges.

Table A1

Distribution of States Within Six Regions

| Region | | | |
|---|---|---|---|
| I | Maine<br>New Hampshire<br>Vermont | Massachusetts<br>Connecticut<br>Rhode Island | Pennsylvania<br>New Jersey<br>New York |
| II | Delaware<br>Maryland<br>Virginia<br>West Virginia | North Carolina<br>South Carolina<br>Georgia<br>Florida | Alabama<br>Kentucky<br>Tennessee |
| III | Minnesota<br>Iowa<br>Michigan | Wisconsin<br>Illinois<br>Indiana | Ohio |
| IV | Washington<br>Oregon<br>Montana | Idaho<br>Wyoming<br>North Dakota | South Dakota<br>Nebraska |
| V | Arizona<br>New Mexico<br>Nevada<br>Utah | Colorado<br>Kansas<br>Texas<br>Oklahoma | Missouri<br>Arkansas<br>Louisiana<br>Mississippi |
| VI | California | | |

## Table A2

## Comparison of Actual and Theoretical Samples of 95 and 100 Colleges

| Stratification Variables | Sample of 95 Colleges | | | Sample of 100 Colleges | | |
|---|---|---|---|---|---|---|
| | A | T | $X^2$ | A | T | $X^2$ |
| 1. Enrollment (df=1) | | | | | | |
| Above median | 44 | 47 | .378 | 48 | 50 | .1600 |
| Below median | 51 | 48 | | 52 | 50 | |
| 2. Regions (df=5) | | | | | | |
| I | 10 | 13 | 3.542 | 11 | 13 | 2.598 |
| II | 10 | 15 | | 11 | 16 | |
| III | 21 | 19 | | 22 | 20 | |
| IV | 10 | 9 | | 10 | 9 | |
| V | 27 | 23 | | 28 | 25 | |
| VI | 17 | 16 | | 18 | 17 | |
| 3. Part-time-full-time ratio (df=2) | | | | | | |
| 0.0 - .49 | 50 | 45 | 1.724 | 52 | 48 | 2.724 |
| .5 - 1.99 | 35 | 36 | | 36 | 38 | |
| 2.00 | 10 | 14 | | 12 | 14 | |
| 4. Curriculum (df=2) | | | | | | |
| Occup & Trans | 84 | 76 | 4.265 | 89 | 79 | 6.122* |
| Trans only | 8 | 13 | | 8 | 14 | |
| Occup only | 3 | 6 | | 3 | 7 | |
| 5. Accreditation (df=1) | | | | | | |
| Regional | 64 | 62 | .186 | 68 | 65 | .395 |
| State only | 31 | 33 | | 32 | 35 | |
| 6. Evening program (df=1) | | | | | | |
| Yes | 91 | 85 | 4.044* | 96 | 89 | 5.004* |
| No | 4 | 10 | | 4 | 11 | |
| 7. Boarding Facilities (df=1) | | | | | | |
| Yes | 34 | 25 | 5.997* | 37 | 27 | 5.072* |
| No | 61 | 70 | | 63 | 73 | |

* Significant at .05 level

## Table A3

## Comparison of Actual Sample and Colleges Declining to Participate or Failing to Respond to Invitation

| Variable | Enroll | Regions | Accred. | Evening Program | Board. Facil. | Type Curric. | Part-time full-time ratio |
|---|---|---|---|---|---|---|---|
| $X^2$ | 0.402 | 5.831 | 6.319* | 6.491* | 3.432 | 3.555 | 1.908 |
| df | 1 | 5 | 1 | 1 | 1 | 2 | 2 |

* Significant at .05 level

## Table A4

## List of Participating Colleges

| Region | State | College |
|---|---|---|
| I | Massachusetts | Berkshire Community College |
| I | Massachusetts | Greenfield Community College |
| I | New York | Adirondack Community College |
| I | New York | Jamestown Community College |
| I | New York | Monroe Community College |
| * I | New York | State Univ. of New York Agric. & Tech. College - Alfred |
| I | New York | State Univ. of New York Agric. & Tech. College - Canton |
| I | New York | State Univ. of New York Agric. & Tech. College - Delhi |
| I | New York | State Univ. of New York Agric. & Tech. College - Morrisville |
| I | New York | Orange County Community College |
| I | Pennsylvania | Pa. State U. McKeesport Campus |
| II | Florida | Brevard Junior College |
| II | Florida | Chipola Junior College |
| II | Florida | Gulf Coast Junior College |
| II | Florida | Indian River Junior College |
| II | Florida | Junior College of Broward County |
| II | Florida | Daytona Beach Junior College |
| II | Maryland | Catonsville Community College |
| * II | Maryland | Frederick Community College |
| II | Virginia | Richard Bland College of William & Mary |
| II | Virginia | Community College of Roanoke |
| II | West Virginia | Potomac State College of W. Va. Univ. |
| III | Illinois | Chicago City College - Loop Campus |
| III | Illinois | Danville Junior College |
| III | Illinois | Freeport Community College |
| III | Illinois | Mt. Vernon Community College |
| III | Illinois | Thornton Junior College |
| III | Illinois | Wabash Valley College |
| III | Indiana | Vincennes University |
| III | Iowa | Burlington Community College |
| III | Iowa | Southwestern Community College |
| III | Iowa | Ellsworth Community College |
| III | Iowa | Iowa Central Community College |
| III | Iowa | Marshalltown Community College |
| III | Iowa | Eastern Iowa Community College - Muscatine |
| III | Michigan | Alpena Community College |
| III | Michigan | Lake Michigan College |
| III | Michigan | Delta College |
| III | Michigan | Flint Community Junior College |
| *III | Michigan | Grand Rapids Junior College |
| III | Michigan | Macomb County Community College |
| III | Michigan | North Central Mighigan College |

### Table A4 Continued

| Region | State | College |
|---|---|---|
| III | Minnesota | Fergus Falls State Junior College |
| III | Minnesota | Mesabi State Junior College |
| IV | Oregon | Treasure Valley Community College |
| IV | Oregon | Clatsop Community College |
| IV | North Dakota | North Dakota School of Forestry |
| IV | Washington | Centralia College |
| IV | Washington | Columbia Basin College |
| IV | Washington | Everett Junior College |
| IV | Washington | Grays Harbor College |
| IV | Washington | Lower Columbia College |
| IV | Washington | Peninsula College |
| IV | Washington | Wenatchee Valley College |
| V | Colorado | Mesa College |
| V | Colorado | Northeastern Junior College |
| V | Colorado | Otero Junior College |
| V | Colorado | Trinidad State Junior College |
| V | Kansas | Dodge City Community Junior College |
| V | Kansas | Independence Community Junior College |
| V | Kansas | Labette Community Junior College |
| V | Mississippi | East Central Junior College |
| V | Mississippi | Hinds Junior College |
| V | Mississippi | Meridian Junior College |
| V | Mississippi | Northeast Mississippi Junior College |
| V | Mississippi | Northwest Mississippi Junior College |
| V | Missouri | Mineral Area College |
| V | Missouri | Metropolitan Junior College |
| V | Oklahoma | Murray State Agric. College |
| V | Oklahoma | Northern Oklahoma College |
| V | Oklahoma | Oklahoma Military Academy |
| V | Texas | Cooke County Junior College |
| V | Texas | Hill Junior College |
| * V | Texas | Howard County Junior College |
| V | Texas | Navarro Junior College |
| V | Texas | San Antonio College |
| V | Texas | San Jacinto College |
| V | Texas | Temple Junior College |
| V | Texas | Weatherford College |
| V | Texas | Wharton County Junior College |
| V | Utah | Dixie College |
| V | Utah | Snow College |
| VI | California | Allan Hancock College |
| VI | California | Barstow College |
| VI | California | Cabrillo College |
| VI | California | Chabot College |
| VI | California | College of the Desert |
| VI | California | Coalinga College |
| VI | California | College of the Sequoias |
| VI | California | Compton College |
| VI | California | Diablo Valley College |

Table A4 Continued

| Region | State | College |
|---|---|---|
| VI | California | Foothill College |
| VI | California | Los Angeles City College |
| * VI | California | Los Angeles Valley College |
| VI | California | Modesto Junior College |
| VI | California | Palo Verde College |
| VI | California | Porterville College |
| VI | California | San Bernardino Valley Junior College |
| VI | California | Sierra College |
| VI | California | Ventura College |

# Appendix B

## Community Data Collection

Collection of community data involved the following steps: (1) The compilation of variables for which data would be gathered. (2) The determination of the service area or district of the college. (3) The closest approximation of this district area with a geographic base which allowed the collection of census data. (4) The actual collection of the data for the community variables.

The list of variables used included all items for which data was available in the different census publications. Early in the compilation of the list it became obvious that some of the desired items would be impossible to collect on all the geographic bases, so the list was divided into two groups. Group I included those variables which would always, for all colleges, be collected on a county basis. This in all cases was either an area equal to or larger than that of Group II, which included items that would be collected on a geographic base most closely approximating the service district of the college. A complete listing of the variables is given in Table B1.

At the time that colleges accepted the invitation to participate in the study they were requested to return a preliminary survey form (see Appendix I), which was sent out with the invitation. Among the information supplied by this form was that used in defining the college's legal district or service area. Once this information had been obtained it was then necessary to approximate these districts with geographic bases that coincided with those of census publications.

Approximations were made using the following guide lines based on the four major types of college districts or service area. There were: first, colleges under local district control whose major service area was the local district (These constituted the majority of colleges); second, colleges under local district control whose service area was much larger than the district; third, colleges under local control which served an area smaller than the district boundaries (usually colleges in local, multiple-college districts); fourth, colleges under state control whose service area was legally the entire state but whose major service area was only a portion of the state.

For colleges with a local district equal to or smaller than the major service area, one and two above, the district boundaries were used. The geographic base was the closest approximation available. City, groups of cities, census tracts, county, etc., -- whichever would be most likely, considering the type of area, to include the majority of the population.

For multiple college districts, three above, an estimate of the actual service area was somewhat more difficult. However, a fairly good estimate of the area was obtained by the use of high school attendance areas. Each of the schools located in a multiple college district (for example Los Angeles) was requested to report the percent of its student body as contributed by the various high schools in the district. Those high school areas contributing the largest proportion of students to the college in question, as opposed to other colleges in the district, were included in the service area for the college.

For state controlled systems (for example New York agricultural and technical colleges) the following formula was used: (1) Counties were ranked by the number of students residing there. (2) Counties were ranked by the percent of their population attending the college. (3) All counties that remained in a contiguous cluster on either criteria separately were included. For example, a tally list was started with the county contributing the largest number of students and continued as long as all subsequent counties remained in a contiguous cluster. As soon as a county broke away from the cluster the countdown was stopped and all counties above that one remained in the list. This was repeated for the second criterion. Then the two lists, one for each criterion, were combined and all counties appearing on the resulting list were included in the service area.

Following the identification of the service area for each college and the appropriate approximation of these bases with geographic regions for which census data could be collected, the next step was the actual collection of the data.

As data sources for all items, with the exception of items 17 to 18 and 51 to 62, government census publications were utilized. For items 17 and 18 the March 1964 issue of Sales Management was utilized. For items 51 to 62 publishers circulation analyses were used.

In spite of the care taken in the delineation of service areas for the colleges, problems were encountered during the actual data collection. These problems in all cases concerned themselves with cities and areas as a result of the government using different geographic bases for data collection for the years 1950 and 1960. The different bases were a result of city growth and the problems presented by their growth were of three kinds. (1) In 1950 a city was not of sufficient size to be treated in the census publications as an independent unit and therefore was included in the county data. However, in 1960 the city had obtained the size sufficient to warrant treatment as an independent unit in census gathering. Thus, data could be obtained for the city for 1960 but none was available for 1950. (2) A city was of sufficient size in 1950 to be treated as an independent single unit. However, in 1960 it had increased in size sufficiently to warrant its treatment by census tracts rather than as a single unit. Thus the problem presenting itself was one where, if only the portion of the city was included in the college district, a very refined data was available for 1960 with no comparable data for 1950. (3) Due to the shifting of population centers, census tract boundaries within a city changed from 1950 to 1960. This did not present problems of the same magnitude as the first two instances cited. In most cases fairly accurate and coinciding areas could be obtained for the two years without much difficulty.

In the first two instances mentioned the problem was dealt with in the following manner. A geographic base, most closely approximating the actual district was determined. In all cases this was possible with 1960 publications. Then, a larger area, containing the refined district, available for both 1950 and 1960, was determined. Once this information had been obtained it was a simple task of approximating the 1950 data for the smaller and more accurate area. In essence the formula was:

$$1950 \text{ refined area} = \frac{1950 \text{ larger area} \times 1960 \text{ refined area}}{1960 \text{ larger area}}$$

Table B2 gives a complete listing of the geographic bases utilized for both Group I and Group II variables. In the case of Group II variables, if approximations for 1950 data were necessary, the data used for the approximations is so noted. If, as in the case of census tracts, no approximation was necessary but only different tracts had to be used, this also is indicated. Also noted are the cases in which the census tracts did not coincide at the two different times.

Table B3, is a complete listing of the specific data sources for the community variables utilized in the study. Part A, as well as being a source listing, is also a complete listing of the variables and their guide numbers. The geographic base in this part is county. Part B gives a complete listing of all other data sources for geographic bases other than county.

## Table B1

## Community Data Variables

### Group I

### County Data Base

| Guide Number | |
|---|---|
| 1 | County land in farms |
| 2 | Average size of farms |
| 3 | Average value of farms |
| 4 | Dollars spent for hired labor |
| 5 | Total retail trade |
| 6 | General merchandise |
| 7 | Apparel and accessories |
| 8 | Food stores |
| 9 | Automotive dealers |
| 10 | Gasoline service stations |
| 11 | Drug, proprietary stores |
| 12 | Expense, for public welfare |
| 13 | Expense for health and hospital |
| 14 | Expense for police |
| 15 | Total population of county |
| 16 | Rural population in county |
| 17 | EBI per capita |
| 18 | EBI per household |
| 51 | Atlantic |
| 52 | Business Week |
| 53 | Forbes |
| 54 | Harper's |
| 55 | National Geographic |
| 56 | New Yorker |
| 57 | Newsweek |
| 58 | Outdoor Life |
| 59 | Popular Science |
| 60 | Saturday Review |
| 61 | Time |
| 62 | U.S. News and World Report |

### Group II

### Approximated District or Service Area Data Base

| | |
|---|---|
| 19 | All housing (dwelling) units |
| 20 | Owner occupied units |
| 21 | Renter occupied units |
| 22 | Units vacant, available |
| 23 | Owned and rented with one or more persons per room |
| 24 | Number owner occupied houses reporting value |
| 24A | Number owner occupied + vacant available for sale reporting value |
| 25 | Owner occupied houses $15,000 |
| 25A | Owner occupied + vacant available for sale ≥ $15,000 |
| 26 | Number reporting rent |
| 27 | Number rentals ≥ $100 (gross) |
| 28 | Total population |
| 29 | Total population (5 year intervals) |
| 30 | Population over 65 |
| 31 | Total married individuals |
| 32 | Number divorced and widowed males |
| 33 | Number divorced and widowed females |
| 34 | School years completed |
| 35 | Total unemployed |
| 36 | Professional |
| 37 | Farmers |
| 38 | Managers |
| 39 | Clerical workers |
| 40 | Sales workers |
| 41 | Craftsmen |
| 42 | Operatives |
| 43 | Private workers |
| 44 | Service workers |
| 45 | Farm laborers |
| 46 | Other laborers |
| 47 | Family incomes |
| 48 | Number males |
| 49 | Number females |
| 50 | Total non-white population |

## Table B2

## Geographic Bases

| College | Variable Group I | Variable Group II |
|---|---|---|
| Allan Hancock College | Santa Barbara County | 1960: Santa Barbara SMSA. Census Tracts: GU 25, LO 27, 28, MR 26, OR 20, PF 18, SM 21-24, SY 19.<br>1950: Approximate above using Santa Barbara County minus Cities of Santa Barbara and Carpenteria. |
| Barstow College | San Bernardino County | 1960: San Bernardino-Riverside-Ontario SMSA. Census Tracts: 89, 90, 93, 94, 95, 96, 103.<br>1950: Approximate above using Barstow (city). |
| Cabrillo College | Santa Cruz County | Same as I. |
| Chabot College | Alameda County | 1960: San Francisco-Oakland SMSA. Census Tracts: LI 17-20, PL 21, CV 22-28, SL 29-45, HA 46-68, HC 69.<br>1950: Approximate above using cities of San Leandro, San Lorenzo, Pleasanton*, Castro Valley*. |
| College of the Desert | Riverside County | 1960: San Bernardino-Riverside-Ontario SMSA. Census Tracts: 145-157, 158 (2/3).<br>1950: Approximate above using cities of Indio, Coachella, Palm Springs. |
| Coalinga College | Fresno County | 1960: Fresno SMSA. Census Tracts: 77-84. After approximation Coalinga, Lemoore and Avenal added on. |

Table B2 Continued

| College | Variable Group I | Variable Group II |
|---|---|---|
| Coalinga College (Continued) | | 1950: Approximate above using cities of Coalinga, Mendota*, Dos Palos*. Add after approximation[1] Lemoore and Avenal. |
| College of the Sequoias | Tulare and Kings Counties | 1960 & 1950: Armona, Corcoran, Culter, Exeter, Farmersville, Goshen, Hanford, Ivanhoe, Orosi, Pixley, Tulare, Visalia, Woodlake, Woodville. |
| Compton College | Los Angeles County | 1960: Los Angeles-Long Beach SMSA.[2] Census Tracts: 5362, 5543, 5400-5403, 5405-5408, 5411-5432, 5535-5539, 5433.<br>1950: 524, 526A, 526B, 526C, 527A, 527B, 527C, 527D, 529B, 529C, 530A, 530B, 531A, 531B, 532, 534A, 534B, 535A, 535B, 535C, 535D, 535E, 535F, 536A, 536B, 335B. |
| Diablo Valley College | Contra Costa County | 1960: San Francisco-Oakland SMSA. Census Tracts: 1-46, 55.<br>1950: Approximate above using cities of Antioch, Brentwood*, Byron*, Concord, Danville*, Diablo*, Knightsen*, Martinex, Oakley*, Pacheco*, Pittsburg, Port Chicago*, San Ramon*, Walnut Creek*. |

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[1] No data available for 1950. It was assumed to have remained relatively stable over the ten year period and 1960 data was used for 1950.

[2] Census Tracts 5433 for 1960 and 335B for 1950 do not have the same northern boundries.

Table B2 Continued

| College | Variable Group I | Variable Group II |
|---|---|---|
| Foothill College | Santa Clara | 1960: San Jose SMSA: Census Tracts: F46-47, H61, G48, N92-105, P117, M84, M86-91, L77-83, O 106-116.<br>1950: Approximate above using cities of Palo Alto, Mountain View, Sunnyvale. |
| Los Angeles City College | Los Angeles County | 1960: L. A. Census Tracts: 1872, 1873, 1882, 1891-1899, 1901-1909, 1911-1919, 1921-1927, 1941-1945, 1951-1959, 1971-1977, 2062-2064, 2071-2079, 2081-2089, 2091-2098, 2111-2119, 2121-2129, 2131-2134, 2141-2149, 2151-2153, 2161-2169 2171, 2172, 2181-2189, 2191-2199, 2201, 2202, 2211-2219, 2221-2227, 2241-2247, 2261-2267, 2281-2289, 2291-2294, 2311-2319, 2321-2328, 2341-2349, 2351-2352, 2361-2364, 2371-2379, 2381-2386, 2391-2399, 2401-2407, 2691, 2692, 2694-2698, 2701-2703, 7001-7005, 7024.<br>1950: L. A. Census Tracts 30, 31A, 32A, 32B, 51, 52A, 52B, 53, 54, 55A, 55B, 56, 57, 58A, 58B, 59, 61-67, 77, 78, 79A, 79B, 80A, 80B, 81-98, 99A, 99B, 100, 101B, 103-109, 110A, 110B, 111-114, 115A, 115B, 116, 117, 145A, 145B, 146A, 146B, 148-150, 151A, 151B, 152-154, 155A, 155B, 156-164, 165A, 165B, 166-169, 170A, 170B, 171-184, 185A, 185B, 186-189, 197A, 197B, 198-200, 201A, 201B, 202-206, 207A, 207B, 208-229, 231-275, 276A, 276B, 277, 279, 280A, 280B, 281, 342B, 364A, 364B, 365B, 366 367, 368B, 384A, 384B, 385, 386, 387A, 387B. |

Table B2 Continued

| College | Variable Group I | Variable Group II |
|---|---|---|
| Los Angeles Valley College | Los Angeles County | 1960: Los Angeles-Long Beach SMSA. Census Tracts: 1011-1014, 1021, 1031-1034, 1041-1048, 1061-1068, 1091, 1094-1096, 1171-1176, 1191-1199, 1201-1204, 1211-1219, 1221-1224, 1231-1239, 1241-1249, 1251-1256, 1271-1279, 1281-1289, 1321, 1411-1417, 1431-1439, 3201, 3203.<br>1950: Census Tracts: 1, 4A 4B, 5-9, 10A, 10B, 10C, 11A, 12, 17A, 17B, 17C, 18A, 18B, 19A, 19B, 20, 21A, 21B, 21C, 22, 23A, 23B, 24, 25A, 25B, 25C, 29A, 29B, 556A, 556B, 555. |
| Modesto Jr. College | Merced, San Joaquin, Stanislaus, and Tuolumne Counties | Stanislaus and Tuolumne Counties. Cities of Gustine, Los Barnos and Ripon. |
| Napa Junior College | Napa County | City of Napa. |
| Palo Verde College | Riverside County | 1960: San Bernardino-Riverside-Ontario SMSA. Census Tracts: 158 (1/3). 159-162.<br>1950: Approximate above using city of Blythe. |
| Porterville College | Tulare County | California Hot Spring*, Ducor*, Johnsondale*, Lindsay, Pine Flat*, Plano*, Porterville, Possey*, Strathmore*, Springville*, Terra Bella*. |
| San Bernardino Valley College | San Bernardino County | 1960: San Bernardino-Riverside-Ontario SMSA. Census Tracts: 27, 33, 35-71, 74, 76, 77, 101.<br>1950: Approximate above using cities of Bloomington, Colton, Crestman, Del Rosa, Highland, Rialto. |

Table B2 Continued

| College | Variable Group I | Variable Group II |
|---|---|---|
| Sierra College | Nevada and Placer Counties | Same as I. |
| Ventura College | Ventura County | Same as I. |
| Mesa College | Garfield, Mesa and Rio Blanco Counties | Mesa County |
| Northeastern Junior College | Logan County | Same as I. |
| Otero Junior College | Otero County | Same as I. |
| Trinidad State Junior College | Las Animas County | Same as I. |
| Brevard Junior College | Brevard County | Same as I. |
| Chipola Junior College | Jackson County | Same as I. |
| Gulf Coast Junior College | Bay County | Same as I. |
| Indian River Junior College | St. Lucie County | Same as I. |
| Junior College of Broward County | Broward County | Same as I. |
| Daytona Beach Junior College | Volusia County | Same as I. |
| Chicago City College - Loop Campus | Cook County | 1960: Chicago Census Tracts: 59-61, 72-74, 78-83, 100-137, 147, 148, 260-264, 289-294, 296, 300, 305Z, 306-317, 318Z, 320, 378Z, 399Z, 407, 408, 413-420, 421Z, 422, 423Z, 428, 429, 432, 434Z, 435, 436, 438Z, 440-441, 442Z, 495-497, 498Z, 499-502, 509, 511-517, 519Z, 520-524, 526Z, 527Z, 532Z, 534Z, 539Z, 541Z, |

Table B2 Continued

| College | Variable Group I | Variable Group II |
|---|---|---|
| Chicago City College<br>(Continued) | | 542-553, 554Z, 556-560, 753, 761, 762Z, 764Z, 765, 767Z, 768-770, 771Z, 773, 777-781.<br>1950: Same tract numbers except for those with a Z suffix. The following tracts for 1950 have to be substituted for all 1960 "Z" tracts.<br>1960 — 1950<br>305Z — 297, 305<br>318Z — 318, 319<br>378Z — 378, 385<br>399Z — 399, 400, 404<br>421Z — 409, 421, 430<br>423Z — 423, 424<br>434Z — 433, 434<br>438Z — 437, 439<br>442Z — 442, 443<br>498Z — 498, 503<br>519Z — 518, 519<br>526Z — 525, 526<br>527Z — 527-529, 535<br>532Z — 530-533<br>534Z — 534, 536-538<br>539Z — 539<br>541Z — 540, 541<br>554Z — 554, 555<br>762Z — 762, 763<br>764Z — 764, 774-776<br>767Z — 766, 767<br>771Z — 771, 772 |
| Danville Junior College | Vermillion County | City of Danville |
| Freeport Community College | Stephenson County | City of Freeport |

Table B2 Continued

| College | Variable Group I | Variable Group II |
|---|---|---|
| Mount Vernon Community College | Jefferson County | City of Mt. Vernon |
| Thornton Junior College | Cook County | City of Harvey |
| Wabash Valley College | Wabash County | City of Mt. Carmel |
| Vincennes University | Knox County | Same as I. |
| Burlington Community College | Des Moines County | City of Burlington |
| Southwestern Community College | Union County | City of Creston |
| Ellsworth Community College | Hardin County | City of Iowa Falls |
| Iowa Central Community College | Webster County | City of Fort Dodge |
| Marshalltown Community College | Marshall County | City of Marshalltown |
| Eastern Iowa Community College - Muscatine Campus | Muscatine County | City of Muscatine |
| Dodge City Community Junior College | Ford County | Dodge City |
| Independence Community Junior College | Montgomery County | City of Independence |
| Labette Community Junior College | Labette County | Same as I. |
| Catonsville Community College | Baltimore County | Same as I. |

Table B2 Continued

| College | Variable Group I | Variable Group II |
|---|---|---|
| Frederick Community College | Frederick County | Same as I. |
| Berkshire Community College | Berkshire County | Same as I. |
| Greenfield Community College | Franklin and Hampshire Counties | Same as I. |
| Alpena Community College | Alpena and Presque Isle Counties | Presque Isle County |
| Lake Michigan College | Berrien County | City of Benton Harbor |
| Delta College | Bay, Midland, and Saginaw Counties | Same as I. |
| Flint Community Junior College | Genesee | City of Flint |
| Grand Rapids Junior College | Kent County | City of Grand Rapids |
| Macomb County Community College | Macomb County | Same as I. |
| North Central Michigan College | Emmet County | Same as I. |
| Fergus Falls State Junior College | Otter Tail County | City of Fergus Falls |
| Mesabi State Junior College (Virginia Junior College) | St. Louis County | Cities of Virginia, Aurora, Gilbert, Buhl*, Mt. Iron*, Biwabik*[3] |

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[3] Only partial data for 1950 for the cities of Aurora and Gilbert was available, therefore, unavailable portion of data was approximated using the city of Virginia.

Table 32 Continued

| College | Variable Group I | Variable Group II |
|---|---|---|
| East Central Junior College | Leake, Neshoba, Newton, Scott, Winston Counties | Same as I. |
| Hinds Junior College | Hinds County | Same as I. |
| Meridian Junior College | Lauderdale County | City of Meridian |
| Northeast Mississippi Junior College | Alcorn, Prentiss, Tippah | Same as I. |
| Northwest Mississippi Junior College | DeSota, Panola, Tate, Yalobusha Counties | Same as I. |
| Mineral Area College | St. Francois County | Same as I. |
| Metropolitan Junior College | Clay and Jackson Counties | Kansas City |
| Adirondack Community College | Warren and Washington Counties | Same as I. |
| Jamestown Community College | Cattaraugus and Erie Counties | Same as I. |
| Monroe Community College | Monroe County | Same as I. |
| State University Agriculture and Technical College Alfred | Allegeny, Cattaraugus, Erie, Genesee, Livingston, Ontario, Steuben, Wayne, Wyoming and Yates Counties | Same as I. |
| State University Agriculture and Technical College Canton | Clinton, Essex, Franklin, Jefferson, St. Lawrence, Lewis, Madison, Onondaga, and Oswego Counties | Same as I. |

Table B2 Continued

| College | Variable Group I | Variable Group II |
|---|---|---|
| State University Agriculture and Technical College Delhi | Broome, Chenango, Delaware, and Otsego Counties | Same as I. |
| State University Agriculture and Technical College Morrisville | Chenango, Cortland, Madison Onandaga and Oneida Counties | Same as I. |
| Orange County Community College | Orange County | Same as I. |
| North Dakota School of Forestry | Bottineau, Cavalier, McHenry, Pembina, Pierce, Renville, Rolette, Towner, and Ward | Same as I. |
| Murray State Agric. College | Carter, Garvin, Johnston, Love, Marshall, and Murray Counties | Same as I. |
| Northern Oklahoma College | Garfield, Grant, Kay, Noble, Pawnee and Osage Counties | Same as I. |
| Oklahoma Military Academy | Mayes, Rogers, Tulsa, and Washington Counties | Same as I. |
| Clatsop Community College | Clatsop County | Same as I. |
| Treasure Valley Community College | Baker and Malheur Counties | Malheur County |
| Pennsylvania State University, McKeesport | Allegheny and Westmoreland Counties | Allegheny County |
| Cooke County Junior College | Cooke County | Same as I. |
| Hill Junior College | Hill County | Same as I. |

Table B2 Continued

| College | Variable Group I | Variable Group II |
|---|---|---|
| Howard County Junior College | Howard County | Same as I. |
| Navarro Junior College | Navarro County | Same as I. |
| San Antonio College | Bexar County | City of San Antonio |
| San Jacinto College | Harris County | Cities of Galena Park, La Porte, and Pasadena |
| Temple Junior College | Bell County | City of Temple |
| Weatherford College | Parker County | Same as I. |
| Wharton County Junior College | Wharton County | Same as I. |
| Dixie Junior College | Garfield, Kane, Washington and Wayne Counties | Same as I. |
| Snow College | Juab, Salt Lake, Sanpete, Sevier and Utah Counties | Same as I. |
| Richard Bland College of William and Mary | Chesterfield and Prince George Counties | Same as I. |
| Community College of Roanoke | Bedford, Floyd, Franklin and Roanoke Counties | Same as I. |
| Centralia College | Lewis County | City of Centralia |
| Columbia Basin College | Franklin County | City of Pasco |
| Everett Junior College | Snohomish County | City of Everett |

Table B2 Continued

| College | Variable Group I | Variable Group II |
|---|---|---|
| Grays Harbor College | Grays Harbor County | City of Aberdeen |
| Lower Columbia College | Cowlitz County | City of Longview |
| Peninsula College | Clallam County | City of Port Angeles |
| Wenatchee Valley College | Chelan County | City of Wenatchee |
| Potomac State College | Mineral County | Same as I. |

*All starred areas were originally included for data collection but subsequently not used because of unavailability of data, due to the small size of the areas.

## Table B3
## Part A
## County Base

**Guide #** **Variable** **Publication** **Data Source**

**Census of Agriculture**

| Guide # | Variable | 1950 | 1954 | 1959 |
|---|---|---|---|---|
| 1. | County land in farms | Co. Table 1. | Co. Table 1 | Co. Table 1. |
| 2. | Average size of farms | " | " | " |
| 3. | Average value of farms | " | " | " |
| 4. | Dollars spent for hired labor | " | " | " |

**Census of Business**

| Guide # | Variable | 1954 | 1958 | 1963 |
|---|---|---|---|---|
| 5. | Total retail trade | Co. Table 102 | Co. Table 102 | Co. Table 3 |
| 6. | General merchandise | " | " | " |
| 7. | Apparel and accessories | " | " | " |
| 8. | Food stores | " | " | " |
| 9. | Automotive dealers | " | " | " |
| 10. | Gasoline service stations | " | " | " |
| 11. | Drug, proprietary stores | " | " | " |

**Census of Government**

| Guide # | Variable | 1957<br>Vol. VI | 1962<br>Vol. VII |
|---|---|---|---|
| 12. | Expenses for public welfare | Table 36 | Table 28 |
| 13. | Expenses for health and hospitals | " | " |
| 14. | Expenses for police | " | " |

**Census of population**

| Guide # | Variable | 1950<br>Part A | 1960<br>Part A |
|---|---|---|---|
| 15. | Total population of county | Table 5 | Table 6 |
| 16. | Rural population in county | " | " |

**Sales Management**

| Guide # | Variable | 1964 |
|---|---|---|
| 17. | EBI per capita | Survey of buying power |
| 18. | EBI per household | " " " |

**Census of Housing**

| Guide # | Variable | 1950 | 1960 |
|---|---|---|---|
| 19. | All housing (dwelling) units | Table 26 | Table 12 or 28* |
| 20. | Owner occupied units | " | " |
| 21. | Renter occupied units | " | " |
| 22. | Units vacant, available | " | " |
| 23. | Owned and rented with one or more person per room | " | Table 15 or 29* |

Table B3 Continued

| Guide # | Variable | Publication | Data Source |
|---|---|---|---|
| | | **Census of Housing Continued** | |
| | | 1950 | 1960 |
| 24. or | Number owner occupied, houses reporting, value | Table 21 or 28 | Table 17 or 30* |
| 24A | Number owner occupied and vacant, available for sale reporting value | xxxxxxxxxxxx | xxxxxxxxxxxx |
| 25. or | Owner occupied houses ≤$15,000 | Table 21 or 28 | Table 17 or 30* |
| 25A | Owner occupied and vacant, available for sale ≥$15,000 | xxxxxxxxxxxxx | xxxxxxxxxxxx |
| 26. | Number reporting rent | Table 21 or 28 | Table 17 or 30 |
| 27. | Number rentals ≥$100 (gross) | " | " |
| | | **Census of Population** | |
| | | 1950<br>Part A | 1960<br>Part A |
| 28. | Total population | Table 5 | Table 6 |
| 29. | Total population under age 35<br>Divided into age intervals as follows:<br>under 5; 5-9; 10-14; 15-19; 20-24;<br>25-29; 30-34; | Table 41 | Table 27,Part B |
| 30. | Population over 65 | " | " |
| 31. | Total married individuals | Table 42 | Table 28,Part B |
| 32. | Number divorced and widowed males | " | " |
| 33. | Number divorced and widowed females | " | " |
| 34. | Years school completed, adults ≥25:<br>separatad into following categories:<br>Elementary: 1-4; 5-7; 8<br>High school: 1-3; 4<br>College: 1-3; 4 or more | " | Table 83,Part C |
| 35. | Total unemployed | Table 43 | Table 83,Part C |
| 36. | Professional | " | Table 84,Part C |
| 37. | Farmers | " | " |
| 38. | Managers | " | " |
| 39. | Clerical workers | " | " |
| 40. | Sales workers | " | " |
| 41. | Craftsmen | " | " |
| 42. | Operatives | " | " |
| 43. | Private workers | " | " |
| 44. | Service workers | " | " |
| 45. | Farm laborers | " | " |
| 46. | Other laborers | " | " |
| 47. | Family incomes for following<br>Divisions: ≤ 1-1,999; 2-2,999; 3-3,999;<br>4-4,999; 5-5,999; 6-6,999; 7-7,999;<br>8-8,999; 9-9,999; 10-14,999; 15-24,999;<br>≥ 25,000 | Table 45 | Table 86,Part C |
| 48. | Number of males | Table 41 | Table 27,Part B |
| 49. | Number of females | " | " |
| 50. | Total non-white population | " | " |

* Most common source

Table B3 Continued

| Guide #. | Variable | Publication | Data Source |
|---|---|---|---|
| | **Publishers Circulation Analysis** | | |
| 51. | Atlantic | April 1963 | |
| 52. | Business Week | March 30, 1963 | |
| 53. | Forbes | September 15, 1962 | |
| 54. | Harper's | March 1963 | |
| 55. | National Geographic | May 1962 | |
| 56. | New Yorker | March 16, 1963 | |
| 57. | Newsweek | March 23, 1964 | |
| 58. | Outdoor Life | October 1962 | |
| 59. | Popular Science | October 1962 | |
| 60. | Saturday Review | February 23, 1963 | |
| 61. | Time | March 22, 1963 | |
| 62. | U. S. News and World Report | March 11, 1963 | |

## Table B3

## PART B

## DISTRICTS OTHER THAN COUNTY

| Guide[1] # | Publication | Census Tracts | 1,000- 2,500 | 2,500 10,000 | 10,000- 25,000 | 25,000- 50,000 | >50,000 ≥10,000 |
|---|---|---|---|---|---|---|---|
| | 1950 | | | | | | |
| 19-22 | Census of housing | 3 | * | T22 | * | * | T17 |
| 23 | " " " | 3 | * | T22 | * | * | T19 |
| 24-27 | " " " | 3 | * | T24 | * | * | T21 |
| 28 | Census of population | 1 | * | T38 | * | * | * |
| 29-30 | " " " | 2 | T40 | T38 | * | * | T33 |
| 31-33 | " " " | 2 | * | T38 | * | * | T34 |
| 34 | " " " | 1 | * | T38 | * | * | T34 |
| 35-46 | " " " | 2 | * | T39 | * | * | T35 |
| 47 | " " " | 1 | * | T39 | * | * | T37 |
| 48-50 | " " " | 1 | T40 | T38 | * | * | T33 |
| | 1960 | | | | | | |
| 19-22 | Census of housing | H-1 | T27 | T25 | T22 | T18 | T12 |
| 23 | " " " | H-1 | T27 | T26 | T24 | T20 | T15 |
| 24-27 | " " " | H-2 | * | T26 | T24 | T21 | T17 |
| 28 | Census of population | P-1 | T23 | T81 & T22 | * | * | T21 & T72 |
| 29-30 | " " " | P-2 | T24 | T22 | * | * | T20 |
| 31-33 | " " " | P-2 | T23 | T22 | * | * | T21 |
| 34 | " " " | P-1 | * | T81 | * | * | T73 |
| 35 | " " " | P-3 | * | T81 | * | * | T73 |
| 36-46 | " " " | P-3 | * | T81 | * | * | T74 |
| 47 | " " " | P-1 | * | T81 | * | * | T76 |
| 48-50 | " " " | P-2 | T23 | T22 | * | * | T20 & T21 |

1. For variable represented by guide number refer to PART A.

* Data not available.

# Appendix C

## Projection and Transgeneration of Community Data

External determinants were broadly defined as factors physically outside of the college but which might hypothetically be functionally related to a college, its objectives, and the ways in which it operates to achieve the objectives. These were classified in two major groups, with variables relating to economic, demographic, sociological and cultural aspects as community variables and attitudes of faculty and students toward environmental dimensions as "input" variables.

In order that community data could be collected, a clear and distinct service area or district had to be defined for each school participating in the survey. A complete listing of the variables for which community data was gathered is given in Appendix B.

The variables were divided into two groups, each of which was collected on a different geographic base. The one set of variables including such data as county land in farms, average size of farms, total retail trade, etc. (Group I), had to be collected on a county base. The remaining variables, such as the number of housing units, value of homes, family incomes, etc. (Group II), were gathered on a geographic base representing the school district as accurately as possible, realizing that some approximation was required in order that a base for which data was available could be selected. In all cases, except those in which the legal district was coterminous, the Group I variables (county base) represented a larger geographic area than the Group II variables, which in all cases most accurately represented the actual district. Quite often it was impossible to collect data for the exact school district because data was published, in most cases, for cities, counties and states and in the case of government census publications it was also available for larger cities in census tracts, allowing a more accurate approximation of a school district should it include only a portion of a city. For a detail description of the procedure for determining the geographic bases, collection of data and listing of geographic bases and data sources, see Appendix B.

Since data for the community variables were not generally available for 1964, the year for which the data was required, most of it had to be collected on at least two previous years and a projection made for 1964. As Table B3 in Appendix B indicates, the years for which data was gathered was not the same for all the variables. In the case of the Census of Agriculture and the Census of Business it was possible to collect data for three different years prior to 1964 (1950, 1954, 1959 and 1954, 1958, 1963, respectively). There are two cases in which projection was not necessary. One is the Effective Buying Income (EBI), per capita and EBI per household which was available for 1964. The other case was the circulation data of the various magazines. As Table B3, Part A, of Appendix B indicates, the publishers circulation analysis was usually based on subscriptions and sales for late 1962 or early 1963. All other data were collected for two years, 1950 and 1960, except for Census of Government, 1957 and 1962.

The collection of the data, in itself, presented no major problems. However, from time to time problems were encountered regarding the service area approximations. Discrepancies or irregular treatment of any school is noted in Table B2 of Appendix B, which is a complete listing of the geographic bases for Group I and Group II variables for the colleges.

## Projection and Transgeneration

Completion of the data collection initiated the last two steps in preparation of the data for analysis. The variables for which data had been collected were listed and re-numbered one through seventy-three (Table C1). Data for each of these variables was then projected to 1964, where necessary.

A straight line projection was used on variables for which data had been collected for two previous years. Thosevariables for which data was available on three previous years were projected using a least squares line fitted to the three data points. In both types of projection there were instances where a progressive and rapid decline existed, so that when the projection was done the result was a negative quantity, which is mathematically feasible, but economically and sociologically impossible. In such instances the dilemma was remedied through proportional projection. In the case of two point projections, if the value resulting was zero or negative, the following formula was employed:

$$Y_3 = Y_2 - \frac{Y_2 \ (Y_1 - Y_2)/Y_1 \ (X_3 - X_2)}{(X_2 - X_1)}$$

where $Y_1$ = first data point, $Y_2$ = second data point, $Y_3$ = projected data point, $X_1$ = year for $Y_1$, $X_2$ = year for $Y_2$, and $X_3$ = 1964. If, in the case of the three point projection, zero or negative values resulted, the following formula was employed:

$$Y_4 = Y_3 - Y_3 \quad \frac{X_2 - X_1}{2} \quad 1 - \frac{Y_2}{Y_1} \; + \; \frac{X_3 - X_2}{2} \quad 1 - \frac{Y_3}{Y_2}$$

where $Y_1$ = first data point, $Y_2$ = second data point, $Y_3$ = third data point, $Y_4$ = projected data point, $X_1$ = year for $Y_1$, $X_2$ = year for $Y_2$, $X_3$ = year for $Y_3$ and $X_4$ = 1964. These alternative projection methods assume that the percent decrease for the two data point situation or the mean percent decrease for the three data point situation would have continued to the next census year. The interception of this projection at the 1964 point on the X axis yields the subsitute value for the projected Y.

Following the projection of the seventy-three variables a transgeneration of these variables to the seventy-two variables was made resulting in more meaningful and comparative percents and ratios. Table C2 gives the complete listing of the projected variables employed in the transgeneration and the resulting transgenerated variables.

## Table C1

## Variables Projected to 1964

* 1. Percent of county land in farms
* 2. Acres of county land in farms
* 3. Average farm size in acres
* 4. Average value of farms
* 5. Dollars spent for hired labor
* 6. Retail trade in $1000 - total
* 7. " " - general merchandise plus apparel and accessories
* 8. " " - food stores
* 9. " " - automotive dealers
*10. " " - gasoline service stations
*11. " " - drug and proprietary stores
*12. Expense for public welfare in county
*13. Expense for health and hospitals in county
*14. Expense for police
15. Number of dwelling units
16. Number of owner occupied units
17. Number of renter occupied units
18. Number of vacant available units
19. Number of units with more than 1 occupant per room
20. Number of owner occupied units reporting value (or vacant)
21. Number of houses equal to or greater than $15,000 in value (or vacant)
22. Number of units reporting rent
23. Number of units with gross rents equal to or greater than $100
*24. Effective buying income (EBI) per capita
*25. Effective buying income (EBI) per household
26. Total population - basic unit
*27. Total county population
*28. Rural population in county
29. Population < 5 years of age
30. " from 5 to 9 years of age
31. " " 10 to 14 years of age
32. " " 15 to 19 years of age
33. " " 20 to 24 years of age
34. " " 25 to 29 years of age
35. " " 30 to 34 years of age
36. " over 65 years of age
37. Number of married males
38. Number of married females
39. Number of divorced and widowed males
40. Number of divorced and widowed females
41. Number of adults with no school years completed
42. Number of adults with 1-4 years elementary school completed
43. " " with 5-7 " " " "
44. " " with 8 years elementary school completed
45. " " with 1-3 years high school completed
46. " " with 4 years high school completed
47. " " with 1-3 years college completed
48. " " with 4 years college or more

## Table C1 Continued

49. Number of unemployed
50. Number of professionals
51. Number of farmers and managers
52. Number of clerical workers
53. Number of sales workers
54. Number of craftsmen
55. Number of operatives
56. Number of private workers
57. Number of service workers
58. Number of laborers
59. Number of families with income < $1000
60. Number of " " " $1000-$1999
61. Number of " " " $2000-$2999
62. Number of " " " $3000-$3999
63. Number of " " " $4000-$4999
64. Number of " " " $5000-$5999
65. Number of " " " $6000-$6999
66. Number of " " " $7000-$9999
67. Number of " " " > $10,000
68. Number of males
69. Number of females
70. Number of non-whites
71. Magazine ratio - class
72. " " - education
73. " " - value of home

*Data for county base

## Table C2

## Community Variables

| Transgenerated Variable Number | Description of Variable | Projected Variables Used |
|---|---|---|
| | $X = \sum_{i=59}^{67}$ projected variables (sum of families with income) | |
| 1. | % of families with income < 1,000 in district | 59/x |
| 2. | " 1-1,999 " " | 60/x |
| 3. | " 2-2,999 " " | 61/x |
| 4. | " 3-3,999 " " | 62/x |
| 5. | " 4-4,999 " " | 63/x |
| 6. | " 5-5,999 " " | 64/x |
| 7. | " 6-6,999 " " | 65/x |
| 8. | " 7-9,999 " " | 66/x |
| 9. | " > 10,000 " " | 67/x |
| 10. | % population non-white in district | 70/26 |
| | $X = \sum_{i=41}^{48}$ projected variables (sum of education categories) | |
| 11. | % of adults with no school years completed in district | 41/x |
| 12. | % of adults with 1-4 years elementary school completed in district | 42/x |
| 13. | % of adults with 5-7 years elementary school completed in district | 43/x |
| 14. | % of adults with 8 years elementary school completed in district | 44/x |
| 15. | % of adults with 1-3 years high school completed in district | 45/x |
| 16. | % of adults with 4 years high school completed in district | 46/x |
| 17. | % of adults with 1-3 years college completed in district | 47/x |
| 18. | % of adults with 4 or more years college completed in district | 48/x |
| 19. | % owned homes valued at $15,000 or more in district | 21/20 |
| 20. | % rental units at $100 or more per month in district | 23/22 |
| 21. | Ratio of rented to owned occupied units in district | 17/16 |
| 22. | EBI per capita (county) | 24 |
| 23. | EBI per household (county) | 25 |
| 24. | % rural population in county | 28/27 |
| 25. | Rural population per acre in county | 28/3 |
| 26. | Population per square mile in county | 27/x (a=2/1 (.15625)) |

### Table C2 Continued

| Transgenerated Variable Number | Description of Variables | Projected Variables Used |
|---|---|---|
| 27. | % vacant housing units in district | 18/15 |
| 28. | % housing units with 1 or more persons per room in district | 19/15 |
| 29. | % population less than 5 years old in district | 29/26 |
| 30. | % population from 5-9 years old in district | 30/26 |
| 31. | % population from 10-14 years old in district | 31/26 |
| 32. | % population from 15-19 years old in district | 32/26 |
| 33. | % population from 20-24 years old in district | 33/26 |
| 34. | % population from 25-29 years old in district | 34/26 |
| 35. | % population from 30-34 years old in district | 35/26 |
| 36. | % population from 35-65 years old in district | 26-x/26 |
| | $X = \sum_{i=29}^{35}$ projected variables (sum of population from > 5 to 34 years old) | |
| 37. | % population older than 65 years in district | 36/26 |
| 38. | Ratio of male to female in district | 68/69 |
| 39. | % males widowed and divorced in district | 39/68 |
| 40. | % females widowed and divorced in district | 40/69 |
| 41. | % widowed and divorced in district | 39+40/26 |
| 42. | % males married in district | 37/68 |
| 43. | % females married in district | 38/69 |
| 44. | % married in district | (37+38)/26 |
| 45. | Expenditure per capita for public welfare in county | 12/27 |
| 46. | Expenditure per capita for health and hospital in county | 13/27 |
| 47. | Expenditure per capita for police in county | 14/27 |
| 48. | Average farm size in county | 3 |
| 49. | Average farm value in county | 4 |
| 50. | Average dollars spent per farm on hired labor in county | 5/x<br>(x = 2/3 = average # of farms) |
| 51. | Retail trade per capita in county - total | 6/27 |
| 52. | " " " " " general, apparel and accessories | 7/27 |
| 53. | " " " " " food | 8/27 |
| 54. | " " " " " auto | 9/27 |

Table C2 Continued

| Transgenerated Variable Number | Description of Variable | Projected Variables Used |
|---|---|---|
| 55. | Retail trade per capita in county - gas | 10/27 |
| 56. | " " " " " drugs and Proprietary | 11/27 |
| 57. | % unemployed in district | 49/26 |
| | $X = \sum_{i=50}^{58}$ projected variables (sum of population employed) | |
| 58. | % population in district employed as professionals | 50/x |
| 59. | % farmers and farm managers | 51/x |
| 60. | % clerical workers | 52/x |
| 61. | % sales workers | 53/x |
| 62. | % craftsmen | 54/x |
| 63. | % operatives | 55/x |
| 64. | % private workers | 56/x |
| 65. | % service workers | 57/x |
| 66. | % farm laborers and laborers | 58/x |
| 67. | Population in district | 26 |
| 68. | Magazine index - class (county) | 71 |
| 69. | Magazine index - education (county) | 72 |
| 70. | Magazine index - value of home (county) | 73 |
| 71. | County population | 27 |
| 72. | % county population in district | 26/27 |

## Appendix D

## Analysis of Community Data

In order to discover the basic dimensions which characterize the districts or service areas of public community junior colleges, the 72 community variables described in Appendices B and C were partitioned and subjected to a number of principal component analyses with varimax rotation. These variables were first classified into two groups depending upon the geographic base. District variables (i.e., variables describing a geographic area which is coterminous with or approximates as closely as possible the actual college district) are treated in Tables D1, D2, and D3. County variables (i.e., variables descriptive of county units) are treated in Tables D4, D5, and D6. This separate treatment was undertaken since the variables were for different geographic areas except in a few cases where college districts were coterminous with county boundaries.

For each group of variables three analyses were conducted. The first analysis consisted only of the particular variables of interest (Tables D1 and D4). The second analysis within each group dealt with the same variables but added three magazine indices to assist with the interpretation of factors (Tables D2 and D5). The third analysis within each set consisted of the variables of interest, the previously added magazine indices, and a gross population measure. This was omitted from the other analyses since previous studies have shown that inclusion of such variables in a battery results in a large general "size" factor which accounts for an inordinate amount of variance and often creates difficulties in describing the factors (James et al, 1963; Miner, 1963; Wood and Almendinger, 1961). (During preliminary phases of the project certain variables were selected from the reports of Miner and James and subjected to principal component analysis with varimax rotation, in order to more accurately assess what would eventually happen with the data available for public junior colleges. These analyses are not reported here but did give some indication of what the most profitable analytical strategies might be.)

Finally, all the variables, both district and county, including the magazine indices but excluding the two indicators of size were analyzed. This is reported in Table D7. Table D8 reports the analysis for all variables including size. These two tables assisted in accounting for similarities and dissimilarities between factors appearing in the analyses based upon the two separate sets of variables. Throughout this treatment of community variables the two basic sets of district and county variables were considered to be the most reliable and valid indicators of community characteristics. Since they were collected using different geographic bases, in most instances, it was most appropriate to treat them separately. For heuristic purposes they were reanalyzed with the added magazine indices and size (population) variables and eventually combined.

In Tables D1 through D8, only loadings significant at the one percent level (Harman, 1960) are reported, to save space. Table D10 contains the correlations of all 72 variables and may be used to reconstruct any of the analyses. For a complete and systematic identification of the 72 variables Table C2 in Appendix C may be consulted.

Table D9 reports the mean, standard deviation, minimum, and maximum values for all 72 variables.

## Table D1

## Principal Component - Varimax Analysis for District Variables

| | | Factor 1 |
|---|---|---|
| 1. | % of families with income < 1,000 in district | .73 |
| 2. | " 1-1,999 in district | .75 |
| 3. | " 2-2,999 " " | .87 |
| 4. | " 3-3,999 " " | .82 |
| 5. | " 4-4,999 " " | .47 |
| 7. | " 6-6,999 " " | -.78 |
| 8. | " 7-9,999 " " | -.83 |
| 9. | " > 10,000 " " | -.70 |
| 10. | % population non-white in district | .50 |
| 11. | % of adults with no school years completed in district | .40 |
| 12. | " with 1-4 years elementary school completed in district | .76 |
| 13. | " with 5-7 years elementary school completed in district | .52 |
| 16. | " with 4 years high school completed in district | -.49 |
| 20. | % rental units at $100 or more per month in district | -.46 |
| 30. | % population from 5-9 years old in district | .33 |
| 31. | % population from 10-14 years old in district | .38 |
| 32. | % population from 15-19 years old in district | .47 |
| 58. | % population in district employed as professionals | -.42 |
| 59. | % farmers and farm managers | .51 |
| 60. | % clerical workers | -.54 |
| 61. | % sales workers | -.35 |
| 64. | % private workers | .62 |
| 66. | % farm laborers and laborers | .34 |
| 72. | % county population in district | .51 |
| | Proportion of variance | .18 |

| | | Factor 2 |
|---|---|---|
| 6. | % of families with income < 5-5,999 in district | .59 |
| 11. | % of adults with no school years completed in district | -.49 |
| 57. | % unemployed in district | -.33 |
| 62. | % craftsmen | .71 |
| 66. | % farm laborers and laborers | -.48 |
| | Proportion of variance | .04 |

| | | Factor 3 |
|---|---|---|
| 13. | % of adults with 5-7 years elementary school completed in district | .37 |
| 14. | " with 8 years elementary school completed in district | .39 |
| 15. | " with 1-3 years high school completed in district | .44 |
| 16. | " with 4 years high school completed in district | -.37 |
| 17. | " with 1-3 years college completed in district | -.71 |
| 18. | " with 4 or more years college completed in district | -.81 |
| 58. | % population in district employed as professionals | -.54 |
| 63. | % operatives | .67 |
| | Proportion of variance | .06 |

Table D1 Continued

| | | Factor 4 |
|---|---|---|
| 10. | % population non-white in district | -.53 |
| 21. | Ratio of rented to owned occupied units in district | -.71 |
| 39. | % males widowed and divorced in district | -.47 |
| 41. | % widowed and divorced in district | -.33 |
| 57. | % unemployed in district | -.51 |
| 58. | % population in district employed as professionals | .34 |
| 69. | Magazine index - education (county) | .35 |
| | Proportion of variance | .05 |

| | | Factor 5 |
|---|---|---|
| 39. | % males widowed and divorced in district | -.32 |
| 42. | % males married in district | -.53 |
| 43. | % females married in district | -.84 |
| 44. | % married in district | -.77 |
| 61. | % sales workers | .35 |
| | Proportion of variance | .05 |

| | | Factor 6 |
|---|---|---|
| 1. | % of families with income < 1,000 in district | -.36 |
| 5. | " 4-4,999 in district | .39 |
| 10. | % population non-white in district | -.45 |
| 30. | % population from 5-9 years old in district | -.42 |
| 59. | % farmers and farm managers | .36 |
| 64. | % private workers | -.49 |
| | Proportion of variance | .04 |

| | | Factor 7 |
|---|---|---|
| 5. | % of families with income < 4-4,999 in district | -.31 |
| 6. | " 5-5,999 " " | -.45 |
| 13. | % of adults with 5-7 years elementary school completed in district | .31 |
| 14. | " with 8 years elementary school completed in district | -.41 |
| 60. | % clerical workers | .45 |
| 65. | % service workers | -.51 |
| | Proportion of variance | .04 |

| | | Factor 8 |
|---|---|---|
| 16. | % of adults with 4 years high school completed in district | -.34 |
| 57. | % unemployed in district | .38 |
| 67. | Population in district | .72 |
| | Proportion of variance | .03 |

## Table D1 Continued

| | | Factor 9 |
|---|---|---|
| 19. | % owned homes valued at $15,000 or more in district | -.70 |
| 61. | % sales workers | .39 |
| 65. | % service workers | .42 |
| 66. | % farm laborers and laborers | -.58 |
| | Proportion of variance | .03 |

| | | Factor 10 |
|---|---|---|
| 27. | % vacant housing units in district | .72 |
| 28. | % housing units with 1 or more persons per room in district | .86 |
| 37. | % population older than 65 years in district | -.38 |
| | Proportion of variance | .05 |

| | | Factor 11 |
|---|---|---|
| 2. | % of families with income < 1-1,999 in district | -.37 |
| 8. | " 7-9,999 " " | .34 |
| 9. | " > 10,000 " " | .36 |
| 14. | % of adults with 8 years elementary school completed in district | -.41 |
| 20. | % rental units at $100 or more per month in district | .56 |
| 29. | % population less than 5 years old in district | .85 |
| 33. | % population from 20-24 years old in district | .76 |
| 34. | % population from 25-29 years old in district | .88 |
| 35. | % population from 30-34 years old in district | .81 |
| 36. | % population from 35-65 years old in district | -.87 |
| 37. | % population older than 65 years in district | -.83 |
| 38. | Ratio of male to female in district | .34 |
| 39. | % males widowed and divorced in district | -.59 |
| 40. | % females widowed and divorced in district | -.76 |
| 41. | % widowed and divorced in district | -.76 |
| 62. | % craftsmen | .37 |
| 65. | % service workers | -.37 |
| | Proportion of variance | .16 |

| | | Factor 12 |
|---|---|---|
| 11. | % of adults with no school years completed in district | -.39 |
| 38. | Ratio of male to female in district | -.79 |
| 42. | % males married in district | .77 |
| 59. | % farmers and farm managers | .47 |
| | Proportion of variance | .05 |

Table D1 Continued

| | | Factor 13 |
|---|---|---|
| 6. | % of families with income < 5-5,999 in district | .39 |
| 27. | % vacant housing units in district | -.38 |
| 30. | % population from 5-9 years old in district | .37 |
| 31. | % population from 10-14 years old in district | .69 |
| 32. | % population from 15-19 years old in district | .59 |
| 61. | % sales workers | -.31 |
| | Proportion of variance | .04 |

| | | Factor 14 |
|---|---|---|
| 11. | % of adults with no school years completed in district | -.34 |
| 12. | " with 1-4 years elementary school completed in district | -.32 |
| 13. | " with 5-7 years elementary school completed in district | -.46 |
| 15. | " with 1-3 years high school completed in district | .69 |
| | Proportion of variance | .02 |

## Table D2

### Principal Component - Varimax Analysis for District Variables and Magazine Indices

| | | Factor 1 |
|---|---|---|
| 1. | % of families with income < 1,000 in district | .82 |
| 2. | " 1-1,999 in district | .76 |
| 3. | " 2-2,999 " " | .83 |
| 4. | " 3-3,999 " " | .71 |
| 6. | " 5-5,999 " " | -.37 |
| 7. | " 6-6,999 " " | -.83 |
| 8. | " 7-9,999 " " | -.71 |
| 9. | " > 10,000 " " | -.50 |
| 10. | % population non-white in district | .70 |
| 11. | % of adults with no school years completed in district | .54 |
| 12. | " with 1-4 years elementary school completed in district | .86 |
| 13. | " with 5-7 years elementary school completed in district | .65 |
| 14. | " with 8 years elementary school completed in district | -.32 |
| 16. | " with 4 years high school completed in district | -.62 |
| 17. | " with 1-3 years college completed in district | -.32 |
| 20. | % rental units at $100 or more per month in district | -.31 |
| 32. | % population from 15-19 years old in district | .32 |
| 58. | % population in district employed as professionals | -.43 |
| 60. | % clerical workers | -.31 |
| 64. | % private workers | .63 |
| 66. | % farm laborers and laborers | .31 |
| | Proportion of variance | .16 |

| | | Factor 2 |
|---|---|---|
| 3. | % of families with income < 2-2,999 in district | .32 |
| 4. | " 3-3,999 " " | .38 |
| 5. | " 4-4,999 " " | .59 |
| 8. | " 7-9,999 " " | -.49 |
| 9. | " > 10,000 " " | -.59 |
| 20. | % rental units at $100 or more per month in district | -.56 |
| 21. | Ratio of rented to owned occupied units in district | -.36 |
| 35. | % population from 30-34 years old in district | -.40 |
| 59. | % farmers and farm managers | .45 |
| 60. | % clerical workers | -.59 |
| 68. | Magazine index - class (county) | -.74 |
| 69. | Magazine index - education (county) | -.92 |
| 70. | Magazine index - value of home (county) | -.89 |
| | Proportion of variance | .10 |

| | | Factor 3 |
|---|---|---|
| 13. | % of adults with 5-7 years elementary school completed in district | .37 |
| 15. | " with 1-3 years high school completed in district | .64 |
| 16. | " with 4 years high school completed in district | -.41 |
| 17. | " with 1-3 years college completed in district | -.72 |

Table D2 Continued

| | | Factor 3 |
|---|---|---|
| 18. | % of adults with 4 or more years college completed in district | -.69 |
| 58. | % of population in district employed as professionals | -.44 |
| 63. | % operatives | .79 |
| | Proportion of variance | .06 |
| | | Factor 4 |
| 39. | % males widowed and divorced in district | .37 |
| 40. | % females widowed and divorced in district | .33 |
| 41. | % widowed and divorced in district | .34 |
| 42. | % males married in district | .74 |
| 43. | % females married in district | .90 |
| 44. | % married in district | .91 |
| | Proportion of variance | .06 |
| | | Factor 5 |
| 11. | % of adults with no school years completed in district | .52 |
| 21. | Ratio of rented to owned occupied units in district | .64 |
| 39. | % males widowed and divorced in district | .44 |
| 57. | % unemployed in district | .68 |
| 62. | % craftsmen | -.52 |
| 66. | % farm laborers and laborers | .32 |
| | Proportion of variance | .04 |
| | | Factor 6 |
| 30. | % population from 5-9 years old in district | -.53 |
| 31. | % population from 10-14 years old in district | -.79 |
| 32. | % population from 15-19 years old in district | -.49 |
| 65. | % service workers | .41 |
| | Proportion of variance | .04 |
| | | Factor 7 |
| 11. | % of adults with no school years completed in district | .34 |
| 38. | Ratio of male to female in district | .74 |
| 42. | % males married in district | -.45 |
| 66. | % farm laborers and laborers | .34 |
| | Proportion of variance | .03 |

Table D2 Continued

| | | Factor 8 |
|---|---|---|
| 6. | % of families with income < 5-5,999 in district | -.83 |
| 62. | % craftsmen | -.47 |
| | Proportion of variance | .03 |
| | | Factor 9 |
| 27. | % vacant housing units in district | .79 |
| 28. | % housing units with 1 or more persons per room in district | .81 |
| 37. | % population older than 65 years in district | -.41 |
| | Proportion of variance | .04 |
| | | Factor 10 |
| 14. | % of adults with 8 years elementary school completed in district | -.37 |
| 20. | % rental units at $100 or more per month in district | .41 |
| 29. | % population less than 5 years old in district | .87 |
| 30. | % population from 5-9 years old in district | .59 |
| 31. | % population from 10-14 years old in district | .30 |
| 33. | % population from 20-24 years old in district | .76 |
| 34. | % population from 25-29 years old in district | .85 |
| 35. | % population from 30-34 years old in district | .74 |
| 36. | % population from 35-65 years old in district | -.89 |
| 37. | % population older than 65 years in district | -.78 |
| 38. | Ratio of male to female in district | .38 |
| 39. | % males widowed and divorced in district | -.58 |
| 40. | % females widowed and divorced in district | -.75 |
| 41. | % widowed and divorced in district | -.76 |
| 61. | % sales workers | -.38 |
| 62. | % craftsmen | .37 |
| 65. | % service workers | -.31 |
| | Proportion of variance | .14 |
| | | Factor 11 |
| 10. | % population non-white in district | -.37 |
| 11. | % of adults with no school years completed in district | .31 |
| 13. | " with 5-7 years elementary school completed in district | .39 |
| 16. | " with 4 years high school completed in district | -.32 |
| 64. | % private workers | -.49 |
| 65. | % service workers | -.31 |
| | Proportion of variance | .03 |

Table D2 Continued

| | | |
|---|---|---|
| | | Factor 12 |
| 14. | % of adults with 8 years elementary school completed in district | -.44 |
| 17. | " with 1-3 years college completed in district | .33 |
| 18. | " with 4 or more years college completed in district | .31 |
| 30. | % population from 5-9 years old in district | -.31 |
| 32. | % population from 15-19 years old in district | .34 |
| 60. | % clerical workers | .34 |
| 61. | % sales workers | -.36 |
| | Proportion of variance | .03 |
| | | Factor 13 |
| 19. | % owned homes valued at $15,000 or more in district | -.68 |
| 61. | % sales workers | .34 |
| 65. | % service workers | .47 |
| 66. | % farm laborers and laborers | -.61 |
| | Proportion of variance | .03 |
| | | Factor 14 |
| 4. | % of families with income < 3-3,999 in district | .36 |
| 18. | % of adults with 4 or more years college completed in district | -.40 |
| 58. | % population in district employed as professionals | -.44 |
| 59. | % farmers and farm managers | .64 |
| | Proportion of variance | .04 |

### Table D3

### Principal Component - Varimax Analysis for District Variables, Size and Magazine Indices

| | | Factor 1 |
|---|---|---|
| 1. | % of families with income < 1000 in district | .83 |
| 2. | " 1-1999 in district | .77 |
| 3. | " 2-2999 " " | .83 |
| 4. | " 3-3999 " " | .69 |
| 6. | " 5-5999 " " | -.37 |
| 7. | " 6-6999 " " | -.82 |
| 8. | " 7-9999 " " | -.70 |
| 9. | " > 10,000 " " | -.48 |
| 10. | % population non-white in district | .74 |
| 11. | % of adults with no school years completed in district | .54 |
| 12. | " with 1-4 years elementary school completed in district | .84 |
| 13. | " with 5-7 years elementary school completed in district | .57 |
| 14. | " with 8 years elementary school completed in district | -.34 |
| 16. | " with 4 years high school completed in district | -.60 |
| 17. | " with 1-3 years college completed in district | -.31 |
| 58. | % population in district employed as professionals | -.40 |
| 60. | % clerical workers | -.33 |
| 64. | % private workers | .68 |
| 66. | % farm laborers and laborers | .36 |
| | Proportion of variance | .15 |

| | | Factor 2 |
|---|---|---|
| 3. | % of families with income < 2-2999 in district | .32 |
| 4. | " 3-3999 " " | .37 |
| 5. | " 4-4999 " " | .55 |
| 8. | " 7-9999 " " | -.47 |
| 9. | " > 10,000 " " | -.56 |
| 20. | % rental units at $100 or more per month in district | -.54 |
| 21. | Ratio of rented to owned occupied units in district | -.40 |
| 35. | % population from 30-34 years old in district | -.40 |
| 59. | % farmers and farm managers | .46 |
| 60. | % clerical workers | -.59 |
| 67. | Population in district | -.38 |
| 68. | Magazine index - class (county) | -.75 |
| 69. | Magazine index - education (county) | -.92 |
| 70. | Magazine index - value of home (county) | -.88 |
| 72. | % county population in district | .36 |
| | Proportions of variance | .10 |

| | | Factor 3 |
|---|---|---|
| 13. | % of adults with 5-7 years elementary school completed in district | .52 |
| 15. | " with 1-3 years high school completed in district | .43 |
| 16. | " with 4 years high school completed in district | -.48 |
| 17. | " with 1-3 years college completed in district | -.75 |

Table D3 Continued

| | Factor 3 |
|---|---|
| 18. % of adults with 4 or more years college completed in district | -.70 |
| 58. % population in district employed as professionals | -.48 |
| 63. % operatives | .82 |
| Proportion of variance | .06 |

| | Factor 4 |
|---|---|
| 27. % vacant housing units in district | .83 |
| 28. % housing units with 1 or more persons per room in district | .76 |
| 31. % population from 10-14 years old in district | -.37 |
| 32. % population from 15-19 years old in district | -.39 |
| 37. % population older than 65 years in district | -.35 |
| Proportion of variance | .04 |

| | Factor 5 |
|---|---|
| 11. % of adults with no school years completed in district | .33 |
| 21. Ratio of rented to owned occupied units in district | .58 |
| 39. % males widowed and divorced in district | .42 |
| 57. % unemployed in district | .71 |
| 62. % craftsmen | -.45 |
| Proportion of variance | .04 |

| | Factor 6 |
|---|---|
| 19. % owned homes valued at $15,000 or more in district | .32 |
| 31. % population from 10-14 years old in district | -.57 |
| 32. % population from 15-19 years old in district | -.50 |
| 33. % population from 20-24 years old in district | .35 |
| 34. % population from 25-29 years old in district | .35 |
| Proportion of variance | .03 |

| | Factor 7 |
|---|---|
| 13. % of adults with 5-7 years elementary school completed in district | -.37 |
| 15. " with 1-3 years high school completed in district | .73 |
| 19. % owned homes valued at $15,000 or more in district | .33 |
| Proportion of variance | .02 |

| | Factor 8 |
|---|---|
| 14. % of adults with 8 years elementary school completed in district | -.39 |
| 29. % population less than 5 years old in district | -.31 |
| 30. % population from 5-9 years old in district | -.53 |
| 38. Ratio of male to female in district | .47 |
| Proportion of variance | .03 |

Table D3 Continued

| | |
|---|---|
| | Factor 9 |
| 6. % of families with income < 5-5999 in district | -.85 |
| 62. % craftsmen | -.46 |
| Proportion of variance | .03 |
| | Factor 10 |
| 42. % males married in district | -.72 |
| 43. % females married in district | -.87 |
| 44. % married in district | -.88 |
| Proportion of variance | .05 |
| | Factor 11 |
| 14. % of adults with 8 years elementary school completed in district | -.42 |
| 20. % rental units at $100 or more per month in district | .40 |
| 29. % population less than 5 years old in district | .82 |
| 30. % population from 5-9 years old in district | .59 |
| 31. % population from 10-14 years old in district | .36 |
| 33. % population from 20-24 years old in district | .69 |
| 34. % population from 25-29 years old in district | .80 |
| 35. % population from 30-34 years old in district | .70 |
| 36. % population from 35-65 years old in district | -.86 |
| 37. % population older than 65 years in district | -.83 |
| 38. Ratio of male to female in district | .43 |
| 39. % males widowed and divorced in district | -.68 |
| 40. % females widowed and divorced in district | -.84 |
| 41. % widowed and divorced in district | -.85 |
| 61. % sales workers | -.39 |
| 62. % craftsmen | .43 |
| 65. % service workers | -.37 |
| Proportion of variance | .15 |
| | Factor 12 |
| 11. % of adults with no school years completed in district | -.55 |
| 19. % owned homes valued at $15,000 or more in district | -.52 |
| 38. Ratio of male to female in district | -.43 |
| 66. % farm laborers and laborers | -.77 |
| Proportion of variance | .04 |
| | Factor 13 |
| 4. % of families with income < 3-3999 in district | -.38 |
| 5. " with income 4-4999 " " | -.34 |
| 18. % of adults with 4 or more years college completed in district | .37 |
| 42. % males married in district | -.38 |
| 58. % population in district employed as professionals | .43 |
| 59. % farmers and farm managers | -.63 |
| Proportion of variance | .04 |

Table D3 Continued

| | Factor 14 |
|---|---|
| 61. % sales workers | .36 |
| 65. % service workers | .70 |
| Proportion of variance | .03 |

| | Factor 15 |
|---|---|
| 58. % population in district employed as professionals | -.39 |
| 67. Population in district | -.63 |
| 72. % county population in district | -.44 |
| Proportion of variance | .03 |

## Table D4

## Principal Component - Varimax Analysis for County Variables

| | | Factor 1 |
|---|---|---|
| 22. | EBI per capita (County) | .86 |
| 23. | EBI per household (county) | .84 |
| 24. | % rural population in county | -.76 |
| 25. | Rural population per acre in county | .45 |
| 26. | Population per square mile in county | .75 |
| 47. | Expenditure per capita for police in county | .88 |
| 49. | Average farm value in county | .68 |
| 50. | Average dollars spent per farm on hired labor in county | .56 |
| 52. | Retail trade per capita in county - general, apparel and accessories | .67 |
| 72. | % county population in district | -.55 |
| | Proportion of variance | .30 |

| | | Factor 2 |
|---|---|---|
| 25. | Rural population per acre in county | .52 |
| 49. | Average farm value in county | -.36 |
| 51. | Retail trade per capita in county - total | -.76 |
| 52. | Retail trade per capita in county - general, apparel and accessories | -.34 |
| 53. | Retail trade per capita in county - food | -.48 |
| 54. | Retail trade per capita in county - auto | -.72 |
| 55. | Retail trade per capita in county - gas | -.77 |
| | Proportion of variance | .15 |

| | | Factor 3 |
|---|---|---|
| 25. | Rural population per acre in county | -.30 |
| 45. | Expenditure per capita for public welfare in county | .80 |
| 48. | Average farm size in county | .83 |
| | Proportion of variance | .09 |

| | | Factor 4 |
|---|---|---|
| 45. | Expenditure per capita for public welfare in county | .28 |
| 46. | Expenditure per capita for health and hospital in county | .86 |
| 50. | Average dollars spent per farm on hired labor in county | .45 |
| 53. | Retail trade per capita in county - food | .41 |
| | Proportion of variance | .08 |

Table D4 Continued

| | | Factor 5 |
|---|---|---|
| 49. | Average farm value in county | -.31 |
| 50. | Average dollars spent per farm on hired labor in county | -.29 |
| 52. | Retail trade per capita in county - general, apparel and accessories | .34 |
| 53. | Retail trade per capita in county - food | .35 |
| 55. | Retail trade per capita in county - gas | -.26 |
| 56. | Retail trade per capita in county - drug and proprietary | .64 |
| 72. | % county population in district | .46 |
| | Proportion of variance | .08 |

Table D5

Principal Component - Varimax Analysis for County Variables and Magazine Indices

| | | Factor 1 |
|---|---|---|
| 22. | EBI per capita (county) | .69 |
| 23. | EBI per household (county) | .66 |
| 24. | % rural population in county | -.71 |
| 25. | Rural population per acre in county | .33 |
| 26. | Population per square mile in county | .67 |
| 45. | Expenditure per capita for public welfare in county | .33 |
| 47. | Expenditure per capita for police in county | .78 |
| 49. | Average farm value in county | .72 |
| 50. | Average dollars spent per farm on hired labor in county | .66 |
| 52. | Retail trade per capita in county - general, apparel and accessoreis | .50 |
| 68. | Magazine index - class (county) | .54 |
| 69. | Magazine index - education (county) | .84 |
| 70. | Magazine index - value of home (county) | .86 |
| 72. | % county population in district | -.48 |
| | Proportion of variance | .28 |

| | | Factor 2 |
|---|---|---|
| 22. | EBI per capita (county) | .27 |
| 23. | EBI per household (county) | .27 |
| 25. | Rural population per acre in county | .60 |
| 26. | Population per square mile in county | .28 |
| 45. | Expenditure per capita for public welfare in county | -.58 |
| 48. | Average farm size in county | -.85 |
| 55. | Retail trade per capita in county - gas | -.33 |
| | Proportion of variance | .10 |

| | | Factor 3 |
|---|---|---|
| 22. | EBI per capita (county) | -.40 |
| 23. | EBI per household (county) | -.31 |
| 24. | % rural population in county | .32 |
| 47. | Expenditure per capita for police in county | -.34 |
| 49. | Average farm value in county | -.29 |
| 51. | Retail trade per capita in county - total | -.82 |
| 52. | " " " " - general, apparel and accessories | -.61 |
| 53. | " " " " - food | -.63 |
| 54. | " " " " - auto | -.73 |
| 55. | " " " " - gas | -.54 |
| 56. | " " " " - drug and proprietary | -.32 |
| | Proportion of variance | .15 |

Table D5 Continued

| | Factor 4 |
|---|---|
| 45. Expenditure per capita for public welfare in county | .40 |
| 46. Expenditure per capita for health and hospital in county | .83 |
| 49. Average farm value in county | .32 |
| 50. Average dollars spent per farm on hired labor in county | .52 |
| 53. Retail trade per capita in county - food | .30 |
| 55. " " " " - gas | .35 |
| Proportion of variance | .08 |

| | Factor 5 |
|---|---|
| 45. Expenditure per capita for public welfare in county | .29 |
| 53. Retail trade per capita in county - food | .27 |
| 55. " " " " - gas | -.34 |
| 56. " " " " - drug and proprietary | .60 |
| 72. % county population in district | .50 |
| Proportion of variance | .05 |

| | Factor 6 |
|---|---|
| 22. EBI per capita (county) | -.36 |
| 23. EBI per household (county) | -.41 |
| 25. Rural population per acre in county | -.30 |
| 45. Expenditure per capita for public welfare in county | -.37 |
| 68. Magazine index - class (county) | .73 |
| 69. Magazine index - education (county) | .40 |
| 70. Magazine index - value of home (county) | .26 |
| Proportion of variance | .07 |

## Table D6

## Principal Component - Varimax Analysis for County Variables, Size and Magazine Indices

| | Factor 1 |
|---|---|
| 22. EBI per capita (county) | .37 |
| 23. EBI per household (county) | .31 |
| 24. % rural population in county | -.54 |
| 26. Population per square mile in county | .45 |
| 47. Expenditure per capita for police in county | .53 |
| 49. Average farm value in county | .56 |
| 50. Average dollars spent per farm on hired labor in county | .55 |
| 52. Retail trade per capita in county - general, apparel and accessories | .31 |
| 68. Magazine index - class (county) | .87 |
| 69. Magazine index - education (county) | .93 |
| 70. Magazine index - value of home (county) | .86 |
| 71. County population | .54 |
| Proportion of variance | .21 |

| | Factor 2 |
|---|---|
| 25. Rural population per acre in county | .46 |
| 45. Expenditure per capita for public welfare in county | -.64 |
| 48. Average farm size in county | -.82 |
| 49. Average farm value in county | -.34 |
| 50. Average dollars spent per farm on hired labor in county | -.26 |
| 55. Retail trade per capita in county - gas | -.26 |
| Proportion of variance | .08 |

| | Factor 3 |
|---|---|
| 22. EBI per capita (county) | -.39 |
| 23. EBI per household (county) | -.33 |
| 24. % rural population in county | .36 |
| 47. Expenditure per capita for police in county | -.25 |
| 51. Retail trade per capita in county - total | -.70 |
| 52. " " " " - general, apparel and accessories | -.61 |
| 53. " " " " - food | -.63 |
| 54. " " " " - auto | -.68 |
| 55. " " " " - gas | -.33 |
| 56. " " " " - drug and proprietary | -.49 |
| Proportion of variance | .12 |

| | Factor 4 |
|---|---|
| 25. Rural population per acre in county | -.37 |
| 49. Average farm value in county | .29 |
| 51. Retail trade per capita in county - total | .38 |
| 54. " " " " - auto | .26 |
| 55. " " " " - gas | .63 |
| 56. " " " " - drug and proprietary | -.43 |

Table D6 Continued

| | Factor 4 |
|---|---|
| 72. % county population in district | -.46 |
| Proportion of variance | .07 |

| | Factor 5 |
|---|---|
| 45. Expenditure per capita for public welfare in county | .57 |
| 46. Expenditure per capita for health and hospital in county | .79 |
| 49. Average farm value in county | .29 |
| 50. Average dollars spent per farm on hired labor in county | .53 |
| 53. Retail trade per capita in county - food | .43 |
| 55. " " " " - gas | .25 |
| Proportion of variance | .08 |

| | Factor 6 |
|---|---|
| 22. EBI per capita (county) | -.73 |
| 23. EBI per household (county) | -.73 |
| 24. % rural population in county | .45 |
| 25. Rural population per acre in county | -.50 |
| 26. Population per square mile in county | -.67 |
| 47. Expenditure per capita for police in county | -.67 |
| 49. Average farm value in county | -.39 |
| 50. Average dollars spent per farm on hired labor in county | -.30 |
| 52. Retail trade per capita in county - general, apparel and accessories | -.48 |
| 68. Magazine index - class (county) | .28 |
| 71. County population | -.62 |
| 72. % county population in district | .52 |
| Proportion of variance | .18 |

## Table D7

### Principal Component - Varimax Analysis for All Variables Except Size

| | | Factor 1 |
|---|---|---|
| 2. | % of families with income 1-1,999 in district | .45 |
| 3. | " 2-2,999 in district | .42 |
| 4. | " 3-3,999 " " | .50 |
| 5. | " 4-4,999 " " | .61 |
| 8. | " 7-9,999 " " | -.60 |
| 9. | " > 10,000 " " | -.71 |
| 20. | % rental units at $100 or more per month in district | -.63 |
| 21. | Ratio of rented to owned occupied units in district | -.54 |
| 22. | EBI per capita (county) | -.81 |
| 23. | EBI per household (county) | -.75 |
| 24. | % rural population in county | .74 |
| 25. | Rural population per acre in county | -.33 |
| 26. | Population per square mile in county | -.71 |
| 32. | % population from 15-19 years old in district | .36 |
| 34. | % population from 25-29 years old in district | -.33 |
| 35. | % population from 30-34 years old in district | -.41 |
| 47. | Expenditure per capita for police in county | -.88 |
| 49. | Average farm value in county | -.69 |
| 50. | Average dollars spent per farm on hired labor in county | -.65 |
| 52. | Retail trade per capita in county - general, apparel and accessories | -.67 |
| 53. | " " " " - food | -.33 |
| 59. | % farmers and farm managers | .52 |
| 60. | % clerical workers | -.62 |
| 68. | Magazine index - class (county) | -.42 |
| 69. | Magazine index - education (county) | -.72 |
| 70. | Magazine index - value of home (county) | -.76 |
| 72. | % county population in district | .57 |
| | Proportion of variance | .16 |

| | | Factor 2 |
|---|---|---|
| 13. | % of adults with 5-7 years elementary school completed in district | .35 |
| 15. | " with 1-3 years high school completed in district | .36 |
| 17. | " with 1-3 years college completed in district | -.54 |
| 25. | Rural population per acre in county | .53 |
| 26. | Population per square mile in county | .34 |
| 49. | Average farm value in county | -.33 |
| 50. | Average dollars spent per farm on hired labor in county | -.38 |
| 51. | Retail trade per capita in county - total | -.33 |
| 54. | " " " " - auto | -.37 |
| 55. | " " " " - gas | -.37 |
| 59. | % farmers and farm managers | -.41 |
| 63. | % operatives | .80 |
| | Proportion of variance | .06 |

Table 27 Continued

| | Factor 3 |
|---|---|
| 15. % of adults with 1-3 years high school completed in district | .37 |
| 19. % owned homes valued at $15,000 or more in district | .37 |
| 46. Expenditure per capita for health and hospital in county | .34 |
| 53. Retail trade per capita in county - food | .43 |
| Proportion of variance | .03 |

| | Factor 4 |
|---|---|
| 21. Ratio of rented to owned occupied units in district | .37 |
| 42. % males married in district | -.67 |
| 43. % females married in district | -.80 |
| 44. % married in district | -.83 |
| Proportion of variance | .04 |

| | Factor 5 |
|---|---|
| 10. % population non-white in district | .43 |
| 45. Expenditure per capita for public welfare in county | -.74 |
| 48. Average farm size in county | -.68 |
| 64. % private workers | .31 |
| Proportion of variance | .03 |

| | Factor 6 |
|---|---|
| 51. Retail trade per capita in county - total | .36 |
| 57. % unemployed in district | .49 |
| 68. Magazine index - class (county) | -.70 |
| 69. Magazine index - education | -.36 |
| 70. Magazine index - value of home (county) | -.45 |
| Proportion of variance | .03 |

| | Factor 7 |
|---|---|
| 39. % farmers and farm managers | .34 |
| 61. % sales workers | -.60 |
| Proportion of variance | .03 |

| | Factor 8 |
|---|---|
| 38. Ratio of male to female in district | -.81 |
| 42. % males married in district | .48 |
| Proportion of variance | .03 |

Table D7 Continued

| | Factor 9 |
|---|---|
| 1. % of families with income < 1,000 in district | .70 |
| 2. " " " 1-1,999 in district | .60 |
| 3. " " " 2-2,999 " " | .71 |
| 4. " " " 3-3,999 " " | .54 |
| 6. " " " 5-5,999 " " | -.33 |
| 7. " " " 6-6,999 " " | -.69 |
| 8. " " " 7-9.999 " " | -.54 |
| 9. " " " > 10,000 " " | -.38 |
| 10. % population non-white in district | .70 |
| 11. % of adults with no school years completed in district | .69 |
| 12. " with 1-4 years elementary school completed in district | .87 |
| 13. " with 5-7 years elementary school completed in district | .56 |
| 16. " with 4 years high school completed in district | -.67 |
| 17. " with 1-3 years college completed in district | -.43 |
| 22. EBI per capita (county) | -.42 |
| 23. EBI per household (county) | -.34 |
| 30. % population from 5-9 years old in district | .35 |
| 58. % population in district employed as professionals | -.36 |
| 61. % sales workers | -.35 |
| 64. % private workers | .50 |
| 66. % farm laborers and laborers | .39 |
| Proportion of variance | .11 |

| | Factor 10 |
|---|---|
| 15. % of adults with 1-3 years high school completed in district | -.50 |
| 56. Retail trade per capita in county - drug and proprietary | -.77 |
| Proportion of variance | .02 |

| | Factor 11 |
|---|---|
| 19. % owned homes valued at $15,000 or more in district | .52 |
| 53. Retail trade per capita in county - food | -.41 |
| 54. " " " " - auto | -.41 |
| Proportion of variance | .02 |

| | Factor 12 |
|---|---|
| 14. % of adults with 8 years elementary school completed in district | -.45 |
| 17. " with 1-3 years college completed in district | .40 |
| 18. " with 4 or more years college completed in district | .69 |
| 58. % population in district employed as professionals | .66 |
| 66. % farm laborers and laborers | -.45 |
| Proportion of variance | .04 |

Table D7 Continued

| | Factor 13 |
|---|---|
| 2. % of families with income 1-1,999 in district | -.40 |
| 20. % rental units at $100 or more per month in district | .47 |
| 23. EBI per household (county) | .37 |
| 29. % population less than 5 years old in district | .77 |
| 30. % population from 5-9 years old in district | .55 |
| 65. % service workers | -.40 |
| Proportion of variance | .12 |

| | Factor 14 |
|---|---|
| 29. % population less than 5 years old in district | .36 |
| 30. % population from 5-9 years old in district | .37 |
| 65. % service workers | .47 |
| Proportion of variance | .02 |

| | Factor 15 |
|---|---|
| 5. % of families with income 4-4,999 in district | -.46 |
| 27. % vacant housing units in district | .64 |
| 28. % housing units with 1 or more persons per room in district | .84 |
| 65. % service workers | .34 |
| Proportion of variance | .03 |

| | Factor 16 |
|---|---|
| 27. % vacant housing units in district | -.57 |
| 30. % population from 5-9 years old in district | .48 |
| 31. % population from 10-14 years old in district | .75 |
| 32. % population from 15-19 years old in district | .54 |
| 36. % population from 35-65 years old in district | -.41 |
| Proportion of variance | .03 |

| | Factor 17 |
|---|---|
| 6. % of families with income 5-5,999 in district | .80 |
| 62. % craftsmen | .45 |
| Proportion of variance | .02 |

## Table D8

## Principal Component - Varimax Analysis for Total Variables

| | | Factor 1 |
|---|---|---|
| 1. | % of families with income < $1,000 in district | .79 |
| 2. | " " 1-1,999 in district | .75 |
| 3. | " " 2-2,999 " " | .83 |
| 4. | " " 3-3,999 " " | .72 |
| 7. | " " 6-6,999 " " | -.73 |
| 8. | " " 7-9,999 " " | -.74 |
| 9. | " " > 10,000 " " | -.62 |
| 10. | % population non-white in district | .57 |
| 11. | % of adults with no school years completed in district | .53 |
| 12. | " with 1-4 years elementary school completed in district | .84 |
| 13. | " with 5-7 years elementary school completed in district | .60 |
| 16. | " with 4 years high school completed in district | -.60 |
| 17. | " with 1-3 years college completed in district | -.40 |
| 18. | " with 4 or more years college completed in district | -.32 |
| 20. | % rental units at $100 or more per month in district | -.44 |
| 22. | EBI per capita (county) | -.73 |
| 23. | EBI per household (county) | -.65 |
| 24. | % rural population in county | .34 |
| 30. | % population from 5-9 years old in district | .40 |
| 31. | % population from 10-14 years old in district | .46 |
| 32. | % population from 15-19 years old in district | .52 |
| 47. | Expenditure per capita for police in county | -.33 |
| 51. | Retail trade per capita in county - total | -.45 |
| 52 | " " " " - general, apparel and accessories | -.49 |
| 53. | " " " " - food | -.44 |
| 58. | % population in district employed as professionals | -.50 |
| 59. | % farmers and farm managers | .37 |
| 60. | % clerical workers | -.49 |
| 61. | % sales workers | -.40 |
| 64. | % private workers | .56 |
| 66. | % farm laborers and laborers | .45 |
| 72. | % county population in district | .37 |
| | Proportion of variance | .16 |

| | | Factor 2 |
|---|---|---|
| 13. | % of adults with 5-7 years elementary school completed in district | .38 |
| 15. | " with 1-3 years high school completed in district | .47 |
| 16. | " with 4 years high school completed in district | -.40 |
| 17. | " with 1-3 years college completed in district | -.64 |
| 18. | " with 4 or more years college completed in district | -.48 |
| 25. | Rural population per acre in county | .43 |
| 26. | Population per square mile in county | .36 |
| 54. | Retail trade per capita in county - auto | -.45 |
| 55. | " " " " - gas | -.41 |

Table D8 Continued

| | Factor 2 |
|---|---|
| 59. % farmers and farm managers | -.33 |
| 63. % operatives | .77 |
| 64. % private workers | -.34 |
| Proportion of variance | .05 |

| | Factor 3 |
|---|---|
| 27. % vacant housing units in district | .39 |
| 30. % population from 5-9 years old in district | -.51 |
| 31. % population from 10-14 years old in district | -.68 |
| 32. % population from 15-19 years old in district | -.36 |
| 48. Average farm size in county | -.36 |
| Proportion of variance | .03 |

| | Factor 4 |
|---|---|
| 11. % of adults with no school years completed in district | .50 |
| 19. % owned homes valued at $15,000 or more in district | .49 |
| 45. Expenditure per capita for public welfare in county | .75 |
| 49. Average farm value | .45 |
| 50. Average dollars spent per farm on hired labor in county | .57 |
| 64. % private workers | -.33 |
| 66. % farm laborers and laborers | .63 |
| 72. % county population in district | -.34 |
| Proportion of variance | .05 |

| | Factor 5 |
|---|---|
| 5. % of families with income 4-4,999 in district | -.42 |
| 27. % vacant housing units in district | .65 |
| 28. % housing units with 1 or more persons per room in district | .87 |
| 37. % population older than 65 years in district | -.35 |
| Proportion of variance | .03 |

| | Factor 6 |
|---|---|
| 6. % of families with income 5-5,999 in district | .78 |
| 62. % craftsmen | .56 |
| Proportion of variance | .02 |

Table D8 Continued

| | |
|---|---|
| | Factor 7 |
| 10. % population non-white in district | .33 |
| 32. % population from 15-19 years old in district | -.37 |
| 48. Average farm size in county | -.38 |
| 59. % farmers and farm managers | -.55 |
| 61. % sales workers | .39 |
| 64. % private workers | -.35 |
| Proportion of variance | .03 |
| | Factor 8 |
| 38. Ratio of male to female in district | .47 |
| 55. Retail trade per capita in county - gas | .41 |
| 67. Population in district | -.56 |
| 72. % county population in district | -.44 |
| Proportion of variance | .02 |
| | Factor 9 |
| 14. % of adults with 8 years elementary school completed in district | .56 |
| 18. " with 4 or more years college completed in district | -.51 |
| 38. Ratio of male to female in district | -.32 |
| 58. % population in district employed as professionals | -.47 |
| Proportion of variance | .03 |
| | Factor 10 |
| 5. % of families with income 4-4,999 in district | -.38 |
| 9. " " " > 10,000 " " | .32 |
| 20. % rental units at $100 or more per month in district | .35 |
| 22. EBI per capita (county) | .33 |
| 24. % rural population in county | -.49 |
| 26. Population per square mile in county | .39 |
| 60. % clerical workers | .37 |
| 68. Magazine index - class (county) | .81 |
| 69. Magazine index - education (county) | .86 |
| 70. Magazine index - value of home (county) | .80 |
| 71. County population | .46 |
| Proportion of variance | .07 |
| | Factor 11 |
| 15. % of adults with 1-3 years high school completed in district | .54 |
| 53. Retail trade per capita in county - food | .51 |
| 54. " " " " - auto | .35 |
| 55. " " " " - gas | .35 |
| 57. % unemployed in district | .46 |
| Proportion of variance | .04 |

Table D8 Continued

| | Factor 12 |
|---|---|
| 60. % clerical workers | -.42 |
| 65. % service workers | -.45 |
| 71. County population | -.32 |
| Proportion of variance | .02 |

| | Factor 13 |
|---|---|
| 10. % population non-white in district | -.47 |
| 11. % of adults with no school years completed in district | -.37 |
| 21. Ratio of rented to owned occupied units in district | -.76 |
| 22. EBI per capita (county) | -.39 |
| 23. EBI per household (county) | -.38 |
| 24. % rural population in county | .45 |
| 26. Population per square mile in county | -.63 |
| 39. % males widowed and divorced in district | -.35 |
| 47. Expenditure per capita for police in county | -.63 |
| 49. Average farm value in county | -.38 |
| 52. Retail trade per capita in county - general, apparel and accessories | -.46 |
| 57. % unemployed in district | -.45 |
| 60. % clerical workers | -.35 |
| 71. County population | -.64 |
| 72. % county population in district | .34 |
| Proportion of variance | .07 |

| | Factor 14 |
|---|---|
| 2. % of families with income 1-1,999 in district | -.42 |
| 8. " " 7-9,999 " " | .33 |
| 9. " " > 10,000 " " | .37 |
| 14. % of adults with 8 years elementary school completed in district | -.37 |
| 18. " with 4 or more years college completed in district | .35 |
| 20. % rental units at $100 or more per month in district | .53 |
| 23. EBI per household (county) | .44 |
| 29. % population less than 5 years old in district | .81 |
| 30. % population from 5-9 years old in district | .57 |
| 33. % population from 20-24 years old in district | .68 |
| 34. % population from 25-29 years old in district | .82 |
| 35. % population from 30-34 years old in district | .76 |
| 36. % population from 35-65 years old in district | -.82 |
| 37. % population older than 65 years in district | -.83 |
| 39. % males widowed and divorced in district | -.69 |
| 40. % females widowed and divorced in district | -.83 |
| 41. % widowed and divorced in district | -.84 |
| 44. % married in district | -.32 |
| 62. % craftsmen | .39 |
| 65. % service workers | -.39 |
| Proportion of variance | .13 |

Table D8 Continued

| | Factor 15 |
|---|---|
| 51. Retail trade per capita in county - total | .33 |
| 56. Retail trade per capita in county - drug and proprietary | .64 |
| Proportion of variance | .02 |

| | Factor 16 |
|---|---|
| 19. % owned homes valued at $15,000 or more in district | -.49 |
| 48. Average farm size in county | .41 |
| 54. Retail trade per capita in county - auto | .45 |
| Proportion of variance | .02 |

| | Factor 17 |
|---|---|
| 39. % males widowed and divorced in district | .39 |
| 42. % males married in district | .74 |
| 43. % females married in district | .75 |
| 44. % married in district | .73 |
| Proportion of variance | .04 |

## Table D9

### Mean and Standard Deviation for Transgenerated Community Variables

| | Variable | Mean | Standard Deviation | Minimum | Maximum |
|---|---|---|---|---|---|
| 1. | % of families with income <1,000 in district | 3 | 3 | .3 | 18.2 |
| 2. | " " " 1-1,999 in district | 6 | 4 | 1.1 | 22.9 |
| 3. | " " " 2-2,999 " " | 6 | 4 | .8 | 19.4 |
| 4. | " " " 3-3,999 " " | 7 | 4 | .6 | 15.6 |
| 5. | " " " 4-4,999 " " | 11 | 4 | 1.2 | 21.2 |
| 6. | " " " 5-5,999 " " | 15 | 5 | 7.4 | 53.7 |
| 7. | " " " 6-6,999 " " | 13 | 3 | 5.2 | 18.1 |
| 8. | " " " 7-9,999 " " | 24 | 7 | 6.7 | 43.8 |
| 9. | " " " >10,000 " " | 16 | 6 | 3.3 | 38.9 |
| 10. | % population non-white in district | 9 | 11 | .02 | 59.4 |
| 11. | % of adults with no school years completed in district | 2 | 2 | .1 | 8.7 |
| 12. | " " 1-4 years elementary school completed in district | 5 | 4 | .2 | 20.7 |
| 13. | % of adults with 5-7 years elementary school completed in district | 12 | 5 | 3.6 | 32.5 |
| 14. | % of adults with 8 years elementary school completed in district | 16 | 5 | 2.7 | 31.8 |
| 15. | % of adults with 1-3 years high school completed in district | 20 | 4 | 7.4 | 46.3 |
| 16. | % of adults with 4 years high school completed in district | 27 | 5 | 13.3 | 47.4 |
| 17. | % of adults with 1-3 years college completed in district | 10 | 3 | 4.9 | 22.1 |
| 18. | " " 4 or more years college completed in district | 8 | 3 | 3.7 | 22.6 |
| 18. | % owned homes valued at $15,000 or more in district | 31 | 42 | 1.5 | 89.3 |
| 20. | % rental units at $100 or more per month in district | 15 | 11 | 1.04 | 59.2 |
| 21. | Ratio of rented to owned occupied units in district | .57 | .60 | .15 | .86 |
| 22. | EBI per capita (county) | 1928.39 | 393.54 | 940 | 2810 |
| 23. | EBI per household (county) | 6413.37 | 1277.5 | 3712 | 9015 |

## Table D9 Continued

| Variable | Means | Standard Deviations | Minimum | Maximum |
|---|---|---|---|---|
| 24. % Rural population in county | 37 | 21 | .8 | 84.7 |
| 25. Rural population per acre in county | .1615 | .1740 | .003 | .88 |
| 26. Population per square mile in county | 315.34 | 803.56 | 1.21 | 5427.37 |
| 27. % vacant housing units in district | 5 | 8 | .4 | 75.3 |
| 28. % housing units with 1 or more persons per room in district | 13 | 15 | .4 | 96.6 |
| 29. % population less than 5 years old in district | 11 | 2 | 4.3 | 16.4 |
| 30. % population from 5-9 years old in district | 11 | 2 | 4.4 | 23.5 |
| 31. % population from 10-14 years old in district | 10 | 1 | 4.3 | 12.8 |
| 32. % population from 15-19 years old in district | 7 | 1 | 3 | 11.9 |
| 33. % population from 20-24 years old in district | 5 | 1 | 1.7 | 8.7 |
| 34. % population from 25-29 years old in district | 5 | 1 | 1.6 | 8.2 |
| 35. % population from 30-34 years old in district | 6 | 1 | 1.8 | 9.2 |
| 36. % population from 35-65 years old in district | 44 | 8 | 29.6 | 79. |
| 37. % population older than 65 years in district | 11 | 4 | 2.5 | 21.9 |
| 38. Ratio of male to female in district | .96 | .09 | .376 | 1.261 |
| 39. % males widowed and divorced in district | 4 | 1 | .4 | 9.2 |
| 40. % females widowed and divorced in district | 12 | .7 | 4 | 22.8 |
| 41. % widowed and divorced | 8 | 2 | .5 | 16.5 |
| 42. % males married in district | 48 | 10 | 3.3 | 83.8 |
| 43. % females married in district | 47 | 7 | 3.3 | 88.6 |
| 44. % married in district | 47 | 7 | 3.3 | 86.4 |
| 45. Expenditure per capita for public welfare in county | 21.1 | 26.1 | 1 | 140.8 |
| 46. " " " for health and hospital in county | 14.2 | 15.5 | 2 | 88.8 |
| 47. Expenditure per capita for police in county | 9 | 4.3 | 2 | 23.9 |
| 48. Average farm size in county | 332.72 | 472.57 | 56.75 | 4219.81 |
| 49. Average farm value in county | 70879.3 | 61662.58 | 10079.2 | 328671.6 |
| 50. Average dollars spent per farm on hired labor in county | 2354.7 | 3331.7 | 364.1 | 11896.1 |
| 51. Retail trade per capita in county - total | 1344.5 | 299.1 | 218.5 | 2040.1 |
| 52. " " " " - general, apparel and accessories | 211.3 | 68.7 | 781 | 418.6 |
| 53. Retail trade per capita in county - food | 320.9 | 66.1 | 111.6 | 514.6 |

Table D9 Continued

| | Variable | Means | Standard Deviation | Minimum | Maximum |
|---|---|---|---|---|---|
| 54. | Retail trade per capita in county - auto | 262.4 | 56.5 | 74.9 | 414.2 |
| 55. | " " " " - gas | 112.2 | 27.5 | 54.8 | 230.5 |
| 56. | " " " " - drugs and proprietary | 51.7 | 45.1 | 39.4 | 481 |
| 57. | % unemployed in district | 2 | 1 | .7 | 48.3 |
| 58. | % population in district employed as professionals | 13 | 3 | 60.2 | 30.2 |
| 59. | % farmers and farm managers | 12 | 5 | 1.1 | 32.4 |
| 60. | % clerical workers | 14 | 5 | 2.2 | 45.1 |
| 61. | % sales workers | 7 | 2 | 2.7 | 12.9 |
| 62. | % craftsmen | 15 | 3 | 7.9 | 28.4 |
| 63. | % operatives | 18 | 5 | 36.2 | 31.6 |
| 64. | % private workers | 3 | 2 | .9 | 9.6 |
| 65. | % service workers | 10 | 2 | 4 | 16.2 |
| 66. | % farm laborers and laborers | 8 | 7 | 1.2 | 38.2 |
| 67. | Population in district | 196250 | 333165 | 5831 | 2042336 |
| 68. | Magazine index - class (county) | .44 | .30 | .124 | 2.857 |
| 69. | " " - education (county) | .23 | .16 | .047 | 1 |
| 70. | " " - value of home (county) | .19 | .14 | .038 | .66 |
| 71. | County population | 553205 | 1346858 | 12936 | 6793605 |
| 72. | % county population in district | .70 | 35 | .60 | 100 |

## Table D10

### Correlation Matrix by Rows Below Diagonal for 72 Projected and Transgenerated Community Variables

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 82 | | | | | | | | | |
| 3 | 72 | 80 | | | | | | | | |
| 4 | 55 | 62 | 81 | | | | | | | |
| 5 | 13 | 29 | 35 | 60 | | | | | | |
| 6 | -38 | -32 | -38 | -21 | 17 | | | | | |
| 7 | -70 | -71 | -76 | -70 | -34 | 19 | | | | |
| 8 | -63 | -72 | -79 | -83 | -62 | - 5 | 69 | | | |
| 9 | -54 | -70 | -65 | -71 | -67 | -13 | 51 | 72 | | |
| 10 | 63 | 51 | 46 | 28 | - 8 | -30 | -49 | -34 | -19 | |
| 11 | 38 | 29 | 39 | 26 | - 4 | -27 | -31 | -24 | -12 | 32 |
| 12 | 76 | 70 | 72 | 56 | 20 | -29 | -63 | -62 | -50 | 57 |
| | 71 | | | | | | | | | |
| 13 | 47 | 47 | 44 | 46 | 30 | -13 | -42 | -46 | -43 | 38 |
| | 41 | 64 | | | | | | | | |
| 14 | -10 | 4 | -14 | - 5 | 25 | 19 | 16 | - 3 | -19 | -22 |
| | -24 | -15 | -12 | | | | | | | |
| 15 | - 2 | - 2 | - 9 | - 9 | -16 | 5 | 8 | 13 | 0 | 4 |
| | -10 | -14 | -15 | - 8 | | | | | | |
| 16 | -53 | -55 | -47 | -42 | -21 | 11 | 51 | 49 | 39 | -44 |
| | -59 | -73 | -66 | -18 | -16 | | | | | |
| 17 | -40 | -42 | -29 | -30 | -27 | 0 | 23 | 35 | 48 | -21 |
| | -26 | -49 | -61 | -34 | -31 | 62 | | | | |
| 18 | -36 | -41 | -32 | -31 | -25 | 12 | 9 | 26 | 54 | -17 |
| | -18 | -38 | -40 | -40 | -31 | 42 | 65 | | | |
| 19 | -20 | -20 | -14 | -24 | -22 | -10 | 12 | 25 | 32 | -10 |
| | 6 | -10 | -16 | - 6 | - 1 | 5 | 19 | 20 | | |
| 20 | -39 | -53 | -48 | -52 | -49 | -13 | 26 | 60 | 74 | -10 |
| | -17 | -39 | -38 | -17 | 1 | 34 | 37 | 49 | 23 | |
| 21 | 8 | - 3 | - 1 | - 4 | -16 | -13 | -18 | 17 | 9 | 34 |
| | 33 | 16 | 6 | - 1 | 3 | -26 | - 3 | 0 | 6 | 14 |
| 22 | -60 | -72 | -73 | -74 | -53 | 5 | 52 | 78 | 81 | -10 |
| | -16 | -56 | -40 | - 0 | 11 | 31 | 37 | 34 | 23 | 69 |
| | 30 | | | | | | | | | |
| 23 | -60 | -75 | -74 | -74 | -52 | 1 | 55 | 80 | 62 | -16 |
| | -12 | -53 | -37 | - 9 | 10 | 31 | 37 | 39 | 23 | 74 |
| | 27 | 93 | | | | | | | | |
| 24 | 35 | 47 | 37 | 47 | 46 | 0 | -26 | -50 | -58 | - 6 |
| | - 6 | 22 | 27 | 25 | - 3 | -24 | -26 | -36 | -11 | -53 |
| | -23 | -62 | -58 | | | | | | | |
| 25 | -20 | -26 | -31 | -34 | -21 | - 2 | 20 | 34 | 32 | 4 |
| | - 5 | -18 | - 1 | - 5 | 21 | 4 | - 8 | 6 | 4 | 28 |
| | 20 | 36 | 41 | -25 | | | | | | |

## Table D10 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 26 | -11 | -19 | -23 | -30 | -38 | -11 | 4 | 41 | 32 | 19 |
| | 8 | -3 | -2 | 3 | 16 | -12 | -3 | -0 | 10 | 44 |
| | 60 | 33 | 30 | -30 | 42 | | | | | |
| 27 | -9 | -6 | -1 | -5 | -9 | -7 | 7 | 10 | 6 | -5 |
| | -2 | -5 | 2 | -8 | 1 | 6 | 7 | -3 | 0 | 5 |
| | 8 | 11 | 13 | 8 | 1 | -1 | | | | |
| 28 | -1 | 3 | 4 | -17 | -26 | -9 | 8 | 13 | 8 | 4 |
| | -7 | -3 | -16 | -10 | 5 | 19 | 11 | -3 | -3 | -4 |
| | 1 | -5 | -2 | 12 | 3 | -10 | 33 | | | |
| 29 | -13 | -26 | -21 | -20 | -14 | 4 | 21 | 24 | 18 | 14 |
| | 5 | -2 | -11 | -23 | 2 | 17 | 4 | 20 | 5 | 36 |
| | 3 | 13 | 33 | -36 | 21 | 17 | -29 | -13 | | |
| 30 | 26 | 13 | 9 | -1 | -11 | -4 | -6 | -3 | -10 | 28 |
| | 11 | 27 | 5 | -19 | -5 | -2 | -8 | 5 | -4 | 2 |
| | -2 | -25 | -8 | -3 | -1 | -4 | -33 | 1 | 34 | |
| 31 | 26 | 23 | 27 | 16 | 0 | -8 | -19 | -18 | -19 | 5 |
| | 13 | 24 | 13 | -18 | 4 | -8 | -16 | -4 | -3 | -19 |
| | -17 | -43 | -33 | 11 | -10 | -12 | -43 | -2 | 33 | 63 |
| 32 | 29 | 33 | 38 | 32 | 22 | -9 | -23 | -33 | -34 | 1 |
| | 27 | 34 | 24 | -20 | 8 | -23 | -21 | -11 | -3 | -34 |
| | -8 | -47 | -41 | 26 | -8 | -13 | -33 | -9 | 13 | 29 |
| | 71 | | | | | | | | | |
| 33 | -13 | -26 | -11 | -10 | -12 | -5 | 9 | 13 | 28 | 20 |
| | 5 | -5 | -5 | -40 | 3 | 15 | 20 | 27 | 9 | 41 |
| | 18 | 20 | 33 | -29 | 29 | 20 | -16 | -10 | 60 | 28 |
| | 11 | 18 | | | | | | | | |
| 34 | -28 | -40 | -26 | -24 | -22 | 1 | 18 | 31 | 39 | 4 |
| | -2 | -14 | -17 | -42 | -3 | 29 | 30 | 38 | 12 | 39 |
| | 3 | 36 | 49 | -47 | 27 | 23 | -20 | -20 | 74 | 34 |
| | 2 | -2 | 78 | | | | | | | |
| 35 | -30 | -47 | -33 | -31 | -32 | -1 | 18 | 40 | 50 | 0 |
| | -3 | -22 | -14 | -33 | 3 | 26 | 20 | 42 | 14 | 63 |
| | 3 | 40 | 33 | -33 | 32 | 28 | -27 | -23 | 65 | 31 |
| | 17 | -6 | 64 | 86 | | | | | | |
| 36 | -0 | 14 | 3 | 9 | 14 | 3 | -5 | -11 | -13 | -17 |
| | -11 | -10 | 1 | 38 | -1 | -11 | -5 | -23 | -5 | -29 |
| | -1 | 3 | -18 | 27 | -18 | -11 | 41 | 14 | -80 | -79 |
| | -60 | -42 | -71 | -75 | -71 | | | | | |
| 37 | 17 | 34 | 18 | 25 | 33 | 7 | -18 | -33 | -37 | -7 |
| | -12 | 3 | 12 | 45 | -11 | -18 | -21 | -24 | -11 | -49 |
| | -5 | -25 | -45 | 32 | -17 | -20 | -20 | -24 | -61 | -41 |
| | -26 | -7 | -59 | -63 | -62 | 63 | | | | |
| 38 | -5 | -12 | -3 | -13 | -16 | -5 | 9 | 11 | 16 | -3 |
| | 25 | 13 | -3 | -41 | 12 | 4 | 9 | 10 | 3 | 13 |
| | 14 | 11 | 13 | -9 | 13 | 9 | 2 | 9 | 20 | 12 |
| | 4 | 13 | 32 | 34 | 24 | -27 | -38 | | | |

## Table D10 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 14 | 22 | 17 | 15 | 18 | -0 | -18 | -19 | -21 | 14 |
| | 9 | 11 | 3 | 29 | 1 | -21 | -11 | -27 | -6 | -27 |
| | 28 | -3 | -21 | 8 | -18 | 4 | 0 | 1 | -41 | -35 |
| | -23 | -9 | -32 | -49 | -49 | 48 | 62 | -36 | | |
| 40 | 21 | 30 | 15 | 14 | 14 | 0 | -20 | -20 | -23 | 18 |
| | 0 | 10 | 13 | 32 | -3 | -22 | -22 | -22 | -6 | -38 |
| | 13 | -7 | -28 | 11 | -19 | -5 | 1 | -7 | -56 | -45 |
| | -35 | -19 | -47 | -58 | -52 | 63 | 78 | -38 | 75 | |
| 41 | 20 | 28 | 14 | 13 | 13 | -0 | -20 | -19 | -20 | 19 |
| | 2 | 10 | 10 | 30 | -0 | -21 | -20 | -22 | -6 | -36 |
| | 17 | -5 | -26 | 8 | -19 | -2 | 2 | -6 | -57 | -47 |
| | -34 | -19 | -45 | -59 | -52 | 64 | 77 | -37 | 81 | 99 |
| 42 | -3 | 7 | 5 | 12 | 11 | 4 | 3 | -12 | -11 | -16 |
| | -18 | -11 | -11 | 25 | -2 | 9 | -2 | -13 | -3 | -8 |
| | -34 | -10 | -15 | 14 | -29 | -27 | 0 | -3 | -14 | -14 |
| | -5 | -4 | -22 | -20 | -22 | 20 | 26 | -68 | 46 | 31 |
| | 31 | | | | | | | | | |
| 43 | -4 | 6 | -2 | -1 | -3 | 3 | 8 | 2 | -6 | -12 |
| | -4 | -2 | -11 | 8 | 17 | 6 | -15 | -13 | -5 | -9 |
| | -10 | -0 | -10 | 5 | -20 | -8 | 4 | -3 | -15 | -21 |
| | -17 | -8 | -24 | -20 | -24 | 25 | 27 | -10 | 39 | 43 |
| | 43 | 60 | | | | | | | | |
| 44 | -5 | 5 | -2 | -1 | -2 | 3 | 8 | -2 | -2 | -16 |
| | -14 | -8 | -14 | 8 | 15 | 13 | -10 | -8 | -3 | -9 |
| | -30 | -2 | -14 | 3 | -26 | -20 | 4 | -4 | -26 | -27 |
| | -17 | -13 | -28 | -26 | -24 | 33 | 32 | -24 | 37 | 47 |
| | 48 | 70 | 94 | | | | | | | |
| 45 | -19 | -25 | 0 | -7 | -6 | -8 | 14 | 12 | 18 | -24 |
| | 29 | 3 | -13 | 4 | -7 | -6 | 12 | 5 | 29 | 8 |
| | 6 | 19 | 16 | -9 | -11 | 0 | 9 | -11 | -11 | -12 |
| | -2 | 3 | -15 | -8 | -9 | 12 | 3 | 16 | 4 | -3 |
| | -1 | -10 | -6 | -7 | | | | | | |
| 46 | 4 | 7 | 13 | 7 | -11 | -5 | -6 | -5 | -2 | -1 |
| | 6 | 4 | -10 | 6 | 13 | -6 | -4 | -8 | 16 | 2 |
| | -3 | -1 | -6 | -1 | -6 | 1 | -7 | -9 | 1 | -1 |
| | 4 | 4 | -1 | -0 | -4 | -0 | 6 | 12 | 6 | 1 |
| | 3 | -2 | 4 | 5 | 20 | | | | | |
| 47 | -30 | -42 | -32 | -44 | -53 | -18 | 23 | 53 | 61 | 12 |
| | 15 | -17 | -32 | -19 | 18 | 13 | 27 | 21 | 23 | 57 |
| | 45 | 71 | 65 | -69 | 34 | 70 | 5 | 1 | 17 | -14 |
| | -19 | -24 | 29 | 35 | 38 | -11 | -31 | 22 | 10 | -8 |
| | -2 | -14 | 6 | 1 | 25 | 14 | | | | |
| 48 | -1 | 6 | 24 | 26 | 35 | -3 | -14 | -19 | -24 | -18 |
| | 8 | 11 | -10 | 3 | -21 | 8 | 11 | 0 | -7 | -12 |
| | -5 | -27 | -25 | 10 | -31 | -14 | -1 | -5 | -0 | 11 |
| | 24 | 28 | -7 | -9 | -15 | -6 | 2 | 4 | 5 | -12 |
| | -9 | 1 | -5 | -6 | 47 | -5 | -13 | | | |

## Table D10 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 49 | -18 | -34 | -15 | -22 | -45 | -23 | 13 | 38 | 48 | 5 |
| | 21 | -3 | -22 | -20 | 2 | 8 | 30 | 16 | 33 | 48 |
| | 30 | 52 | 48 | -47 | -1 | 43 | 9 | -3 | 18 | -2 |
| | -8 | -17 | 31 | 36 | 34 | -18 | -40 | 29 | -6 | -21 |
| | -18 | -11 | -0 | -5 | 31 | 18 | 70 | 4 | | |
| 50 | -11 | -29 | -7 | -16 | -40 | -26 | 6 | 25 | 49 | 7 |
| | 31 | -0 | -19 | -24 | 9 | -1 | 28 | 16 | 36 | 42 |
| | 19 | 47 | 41 | -38 | 4 | 22 | 4 | -6 | 0 | -14 |
| | -9 | -13 | 23 | 25 | 27 | -5 | -27 | 27 | -1 | -12 |
| | -8 | -8 | -0 | 1 | 47 | 28 | 67 | -4 | 79 | |
| 51 | -37 | -37 | -34 | -22 | -19 | 12 | 36 | 24 | 34 | -21 |
| | -10 | -30 | -30 | 13 | -3 | 23 | 19 | 13 | 10 | 15 |
| | 14 | 34 | 27 | -21 | -11 | 9 | 1 | 1 | 4 | -14 |
| | -13 | -14 | 4 | 5 | 0 | 6 | -0 | -3 | 17 | 9 |
| | 11 | 18 | 23 | 23 | 9 | 3 | 29 | -1 | 30 | 22 |
| 52 | -41 | -48 | -49 | -45 | -43 | 4 | 31 | 54 | 55 | 1 |
| | -8 | -36 | -36 | -14 | 12 | 29 | 25 | 39 | 17 | 48 |
| | 20 | 63 | 59 | -67 | 15 | 42 | -4 | -4 | 21 | 2 |
| | -10 | -27 | 19 | 34 | 45 | -19 | -25 | -3 | 0 | -1 |
| | 1 | 2 | 7 | 8 | 7 | 2 | 64 | -20 | 39 | 33 |
| | 45 | | | | | | | | | |
| 53 | -34 | -31 | -34 | -30 | -24 | 5 | 31 | 34 | 33 | -23 |
| | -9 | -28 | -26 | 6 | 20 | 20 | -1 | 8 | 11 | 22 |
| | 6 | 42 | 29 | -19 | 13 | 10 | 10 | 11 | -5 | -24 |
| | -17 | -21 | -10 | -3 | 1 | 16 | 8 | 6 | 21 | 10 |
| | 14 | 16 | 32 | 33 | 13 | 21 | 41 | -11 | 25 | 27 |
| | 49 | 42 | | | | | | | | |
| 54 | -17 | -23 | -2 | 0 | -16 | -7 | 7 | 9 | 24 | -2 |
| | -3 | -14 | -30 | -8 | -9 | 31 | 23 | 17 | 5 | 25 |
| | 1 | 24 | 16 | -30 | -21 | -0 | 4 | -4 | 8 | -9 |
| | -18 | -27 | 12 | 19 | 12 | 0 | -10 | -0 | 7 | -1 |
| | 3 | 21 | 27 | 31 | 12 | 16 | 34 | 7 | 38 | 34 |
| | 51 | 37 | 45 | | | | | | | |
| 55 | -19 | -0 | -0 | 5 | -1 | 3 | 7 | -2 | 2 | -19 |
| | -10 | -14 | -31 | 2 | -5 | 23 | 32 | 1 | -1 | -1 |
| | -9 | 2 | -8 | 8 | -39 | -20 | -2 | -2 | -5 | -12 |
| | -5 | -1 | -8 | -2 | -13 | 9 | 12 | 10 | 23 | 12 |
| | 14 | 24 | 33 | 29 | 7 | 21 | 6 | 21 | 25 | 21 |
| | 43 | 6 | 22 | 37 | | | | | | |
| 56 | -17 | -20 | -22 | -20 | -17 | -0 | 15 | 23 | 24 | -7 |
| | 6 | -16 | -1 | -26 | -16 | 26 | 13 | 27 | 8 | 20 |
| | 3 | 21 | 21 | -19 | 1 | 7 | -3 | -3 | 7 | -3 |
| | -8 | -11 | 5 | 9 | 11 | -2 | -5 | 5 | -6 | -4 |
| | -3 | -3 | 4 | 4 | 5 | 4 | 15 | -12 | 6 | 7 |
| | 16 | 26 | 17 | 13 | -3 | | | | | |

## Table D10 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57 | -3 | -1 | -7 | -8 | -9 | 6 | 7 | 9 | -1 | 14 |
| | 25 | 2 | 3 | 15 | 23 | -23 | -20 | -18 | -1 | -0 |
| | 34 | 16 | 16 | -3 | 21 | 23 | -4 | 1 | 4 | -8 |
| | -5 | 5 | -8 | -8 | -5 | 5 | 0 | -1 | 24 | 10 |
| | 12 | -2 | 5 | -6 | 4 | 19 | 28 | -20 | -2 | 13 |
| | 16 | 25 | 18 | 3 | 9 | 2 | | | | |
| 58 | -40 | -41 | -45 | -40 | -23 | 6 | 27 | 41 | 48 | -39 |
| | -30 | -50 | -44 | -12 | -7 | 40 | 44 | 69 | 9 | 45 |
| | -18 | 34 | 41 | -14 | 7 | -8 | 10 | 4 | 12 | -2 |
| | -11 | -17 | 4 | 22 | 30 | -7 | -15 | 3 | -27 | -16 |
| | -18 | -1 | -1 | 5 | 10 | -9 | 6 | 1 | 1 | -0 |
| | 12 | 27 | 7 | 4 | 6 | 16 | -17 | | | |
| 59 | 26 | 37 | 53 | 58 | 48 | -9 | -38 | -52 | -50 | -7 |
| | 4 | 24 | 9 | 13 | -24 | -4 | 0 | -24 | -20 | -36 |
| | -16 | -53 | -55 | 44 | -38 | -35 | -9 | 1 | -18 | 3 |
| | 22 | 29 | -17 | -22 | -34 | 8 | 21 | -19 | 23 | -2 |
| | -0 | 37 | 7 | 8 | -2 | 9 | -37 | 38 | -18 | -14 |
| | -2 | -43 | -14 | 10 | 30 | -15 | -8 | -31 | | |
| 60 | -39 | -48 | -49 | -47 | -40 | 4 | 30 | 50 | 59 | -4 |
| | -20 | -42 | -27 | -14 | 4 | 29 | 35 | 36 | -4 | 52 |
| | 19 | 62 | 59 | -60 | 27 | 45 | 1 | -9 | 1 | -24 |
| | -20 | -31 | 23 | 30 | 39 | -1 | -19 | -5 | -7 | -4 |
| | -0 | -13 | -13 | -6 | 2 | -16 | 52 | -19 | 19 | 20 |
| | 19 | 51 | 15 | 14 | -14 | 17 | 5 | 25 | -48 | |
| 61 | -13 | -14 | -27 | -13 | 3 | -5 | 19 | 17 | 16 | -12 |
| | -29 | -28 | -7 | 30 | -14 | 12 | 2 | 10 | -4 | 8 |
| | -18 | 15 | 9 | -13 | 10 | -6 | -3 | -12 | -19 | -21 |
| | -28 | -38 | -30 | -23 | -4 | 32 | 36 | -39 | 8 | 31 |
| | 28 | 10 | -2 | 8 | -11 | -12 | -11 | -15 | -17 | -17 |
| | 4 | 21 | -2 | 2 | -16 | 8 | -9 | 25 | -23 | 16 |
| 62 | -33 | -30 | -33 | -32 | -8 | 45 | 21 | 24 | 8 | -25 |
| | -33 | -26 | -13 | -14 | 11 | 27 | 9 | 19 | 2 | 30 |
| | -20 | 22 | 26 | -24 | 19 | 16 | 14 | 1 | 26 | 5 |
| | -13 | -15 | 19 | 41 | 36 | -20 | -34 | 20 | -41 | -34 |
| | -37 | -13 | -1 | -4 | -9 | -9 | 7 | -4 | 7 | -12 |
| | -14 | 10 | 3 | -1 | -13 | 3 | -21 | 25 | -28 | 13 |
| | -4 | | | | | | | | | |
| 63 | 14 | 15 | -5 | -11 | 14 | 0 | 2 | 5 | -20 | 15 |
| | -4 | 6 | 37 | 15 | 31 | -30 | -47 | -38 | -16 | -15 |
| | 14 | 1 | 0 | 9 | 23 | 20 | -6 | -1 | -3 | -3 |
| | 1 | 11 | -10 | -16 | -8 | 5 | 6 | 1 | 3 | 13 |
| | 11 | -17 | -1 | -7 | -23 | -9 | -11 | -20 | -23 | -28 |
| | -21 | -12 | -5 | -39 | -34 | -3 | 18 | -28 | -27 | -12 |
| | -3 | 8 | | | | | | | | |

## Table D10 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 64 | 61 | 58 | 58 | 51 | 17 | -19 | -50 | -56 | -43 | 67 |
| | 12 | 51 | 22 | -13 | -11 | -22 | -15 | -12 | -18 | -34 |
| | -4 | -55 | -51 | 27 | -17 | -25 | -6 | 20 | -3 | 20 |
| | 7 | 5 | 2 | -14 | -22 | -1 | 10 | -12 | 9 | 23 |
| | 20 | 2 | -1 | 1 | -30 | -3 | -32 | -8 | -29 | -22 |
| | -25 | -21 | -32 | -3 | -8 | -14 | -4 | -29 | 19 | -31 |
| | 3 | -24 | -10 | | | | | | | |
| 65 | -10 | 3 | -4 | 15 | 37 | 15 | -0 | -15 | -21 | -6 |
| | -10 | -14 | -18 | 38 | -13 | 10 | -3 | -5 | -13 | -19 |
| | 10 | -1 | -11 | 8 | -13 | -7 | -0 | -14 | -16 | -30 |
| | -34 | -15 | -15 | -23 | -29 | 32 | 44 | -23 | 38 | 45 |
| | 44 | 16 | 15 | 14 | -10 | -5 | -10 | 5 | -15 | -18 |
| | 17 | 5 | 3 | 13 | 23 | -1 | 12 | 3 | 8 | -13 |
| | 38 | -14 | -14 | 15 | | | | | | |
| 66 | 27 | 21 | 35 | 24 | -17 | -21 | -13 | -21 | -8 | 17 |
| | 53 | 46 | 17 | -15 | 0 | -30 | -13 | -23 | 33 | -26 |
| | 8 | -26 | -24 | 19 | -17 | -17 | 1 | 7 | 6 | 26 |
| | 27 | 23 | 4 | -8 | -14 | -14 | -8 | 26 | 4 | -11 |
| | -9 | -5 | 2 | -3 | 30 | 26 | 4 | 7 | 29 | 37 |
| | 3 | -19 | 4 | 6 | 17 | -7 | 6 | -39 | 13 | -41 |
| | -44 | -45 | -29 | 12 | -28 | | | | | |
| 67 | -16 | -23 | -28 | -31 | -13 | 7 | 13 | 24 | 29 | 4 |
| | 9 | -15 | -1 | -12 | 13 | -0 | -2 | 21 | 12 | 33 |
| | 12 | 30 | 37 | -43 | 39 | 25 | -9 | -19 | 22 | 4 |
| | -2 | -17 | 17 | 28 | 42 | -19 | -14 | -4 | -18 | -17 |
| | -16 | -14 | -19 | -16 | 2 | -3 | 33 | -15 | 0 | 11 |
| | -6 | 34 | 4 | -5 | -34 | 23 | 19 | 20 | -31 | 40 |
| | 14 | 13 | 2 | -25 | -12 | -18 | | | | |
| 68 | 9 | 4 | 0 | 2 | -23 | -14 | -18 | 6 | 18 | 15 |
| | 7 | 1 | 2 | -19 | -2 | 4 | 11 | 7 | 4 | 17 |
| | 12 | 16 | 9 | -32 | 4 | 22 | -2 | -8 | -3 | -9 |
| | -8 | -13 | 8 | 15 | 15 | 0 | 1 | 2 | -3 | 7 |
| | 7 | -5 | -3 | 0 | 2 | 14 | 27 | -10 | 32 | 32 |
| | 5 | 17 | 12 | 17 | 4 | 7 | -13 | -11 | -10 | 23 |
| | 10 | 9 | -20 | 3 | 8 | -1 | 11 | | | |
| 69 | -13 | -28 | -27 | -27 | -37 | -13 | 2 | 35 | 49 | 9 |
| | 8 | -13 | -3 | -24 | 5 | 6 | 17 | 24 | 15 | 50 |
| | 25 | 54 | 49 | -58 | 31 | 48 | -1 | -13 | 10 | -10 |
| | -14 | -22 | 21 | 34 | 42 | -11 | -22 | 11 | -12 | -11 |
| | -9 | -14 | -6 | -6 | 7 | 5 | 55 | -18 | 51 | 50 |
| | 4 | 41 | 21 | 11 | -12 | 13 | -4 | 10 | -34 | 47 |
| | 11 | 21 | -9 | -23 | -7 | -14 | 33 | 76 | | |

Table D10 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 | -16 | -33 | -27 | -27 | -40 | -19 | 5 | 40 | 53 | 7 |
| | 13 | -12 | -10 | -27 | 6 | 7 | 22 | 26 | 18 | 55 |
| | 31 | 59 | 53 | -55 | 23 | 48 | 1 | -13 | 9 | - 9 |
| | -10 | -18 | 24 | 32 | 38 | -11 | -25 | 16 | -10 | -12 |
| | - 9 | -15 | - 5 | - 4 | 24 | 7 | 61 | -10 | 59 | 61 |
| | 8 | 44 | 27 | 20 | - 8 | 14 | - 3 | 15 | -34 | 45 |
| | 4 | 17 | -11 | -25 | - 8 | - 9 | 26 | 62 | 88 | |
| 71 | - 9 | -22 | -24 | -32 | -38 | -11 | 9 | 35 | 40 | 27 |
| | 10 | - 8 | - 7 | - 7 | 17 | - 7 | 13 | 3 | 14 | 39 |
| | 48 | 57 | 49 | -52 | 28 | 76 | - 2 | -10 | - 0 | -20 |
| | -15 | -16 | 22 | 24 | 25 | - 2 | -18 | 5 | 8 | - 1 |
| | 4 | -22 | -16 | -17 | 14 | 6 | 75 | -14 | 51 | 47 |
| | 18 | 45 | 13 | 10 | -12 | 11 | 27 | - 9 | -34 | 61 |
| | - 9 | 1 | 11 | -24 | -10 | -13 | 39 | 29 | 54 | 56 |
| 72 | 23 | 32 | 34 | 41 | 47 | 5 | -34 | -43 | -44 | 1 |
| | -11 | 13 | 28 | - 8 | - 2 | - 7 | -23 | - 2 | -21 | -21 |
| | -28 | -45 | -35 | 29 | - 2 | -34 | -12 | -18 | 8 | 18 |
| | 25 | 25 | 1 | - 1 | 2 | -16 | 4 | -16 | -23 | -16 |
| | -20 | 3 | -18 | -11 | -25 | - 5 | -44 | 15 | -47 | -40 |
| | -25 | -30 | -13 | -10 | -18 | - 1 | -21 | 1 | 30 | -24 |
| | - 6 | 12 | 8 | 17 | - 5 | -16 | 18 | -16 | -24 | -30 |
| | -40 | | | | | | | | | |

# Appendix E

## Analysis of JCES Data

This appendix records the basic data and related statistics for the analyses of the junior college environment scales. For preliminary analysis, to discover the basic dimensions and the items which best define these dimensions, the 300 items were arbitrarily divided into three sets of 100 items each. The first set was composed of every third item beginning with item one. The second set was composed of every third item beginning with item two and the final set composed of every third item beginning with item three. Correlation matrices for these three sets of items are reported in Tables E4, E5, and E6. These correlations were based on the mean percent answering each item "true" at 95 of the 100 colleges. This smaller sample was used, instead of the larger sample, since some of the colleges were late in returning completed instruments or did not have sufficient returns at the time the analysis was done. Further delay would have placed the project considerably behind schedule. Appendix A identifies the 95 colleges. Few differences would have been expected if the entire sample had been used, Later item analysis procedures used the entire sample of 100 colleges.

Each set of 100 items was subjected to a principal component analysis with varimax rotation. For each of these analyses, factor scores were computed for each case on each factor (Cooley and Lohnes, 1962). These factor scores were then correlated with the entire set of 300 items. This permitted an estimate of the "loading" of all items on each factor to be computed. The correlation of all items with the factors resulting from the analysis of items 1, 3, ---, 298, are listed in Table E1. Similarly, the correlation of all items with factor scores resulting from analysis of the other two sets of items are listed in Tables E2 and E3.

Assuming that the same basic dimensions would appear in each of the three sets of items, this correlation of factors and items permitted a matching of the factors to occur. Four identifiable and matchable factors appeared in each of the three sets of items. Selecting only items that correlated I.30 or greater with a given factor in each of its three versions, sets of items which described each of these four basic dimensions were delineated. These loadings were significant at the five percent level (Harmon, 1960).

Each of these four sets of items was then subjected to principal component analysis with varimax rotation to further purify the dimension. Item analysis procedures, described in Appendix J and elsewhere, were combined with content analysis to develop the final scales.

Table E7 reports the mean percent answering true and standard deviation on the 300 items for 100 colleges.

## Table E1

### Correlation of all JCES Item Percents and Factor Scores from Principal Component - Varimax Analysis of Items 1, 4, 7,--- 298

| Item | Factor<br>1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58 | -25 | 6 | 1 | 40 | 7 | - 5 | -29 | - 5 | 3 | -25 | 7 | -17 |
| 2 | -14 | -25 | 6 | 26 | - 3 | 33 | -46 | -24 | 35 | 24 | -18 | - 2 | 4 |
| 3 | 13 | -50 | - 7 | 43 | 30 | 10 | -61 | -21 | - 3 | - 3 | -25 | 35 | - 3 |
| 4 | -13 | 17 | 17 | -20 | - 6 | -18 | -14 | 12 | 4 | - 5 | 27 | -19 | 70 |
| 5 | 11 | -39 | - 5 | 31 | 21 | 20 | -34 | -39 | 20 | 19 | -25 | 3 | -16 |
| 6 | 64 | -31 | -18 | 14 | 30 | 6 | - 1 | -23 | -14 | - 0 | -25 | 14 | -11 |
| 7 | - 2 | -28 | -14 | 21 | 18 | 2 | -71 | -12 | - 7 | - 8 | 4 | 14 | 5 |
| 8 | 4 | 22 | 13 | -39 | -10 | -30 | 6 | 15 | -18 | -14 | 22 | -34 | 75 |
| 9 | 51 | -13 | 10 | 40 | 53 | 31 | - 2 | -37 | - 3 | 30 | -42 | 2 | -33 |
| 10 | 28 | 40 | -13 | -12 | 15 | - 5 | 17 | 13 | -20 | -17 | 5 | 16 | 22 |
| 11 | 23 | -41 | - 6 | 48 | 28 | 15 | -27 | -33 | - 2 | 9 | -38 | 18 | -10 |
| 12 | 9 | -20 | -21 | 11 | 24 | 15 | - 6 | -13 | 2 | 4 | 0 | 8 | 5 |
| 13 | - 3 | -15 | - 6 | 32 | 2 | 64 | -14 | -13 | 6 | 34 | - 5 | - 2 | - 6 |
| 14 | 29 | -14 | 30 | 45 | 11 | 32 | - 1 | -26 | 29 | 28 | -36 | 18 | -56 |
| 15 | 33 | -27 | -13 | 53 | 28 | 13 | -18 | -24 | - 2 | 11 | -29 | 32 | -10 |
| 16 | 72 | - 2 | -16 | 20 | 23 | -24 | 17 | -19 | -26 | 7 | -25 | 11 | 11 |
| 17 | 17 | -27 | 7 | 73 | 28 | 46 | -25 | -29 | 26 | 33 | -43 | 35 | -54 |
| 18 | 50 | -25 | 6 | 61 | 35 | 31 | -18 | -38 | 23 | 29 | -44 | 23 | -32 |
| 19 | 54 | - 8 | - 3 | 33 | 16 | - 9 | -10 | -27 | -25 | - 6 | -40 | 33 | -16 |
| 20 | 15 | -27 | -25 | 25 | 14 | -14 | -25 | -17 | -21 | 4 | -16 | 23 | 35 |
| 21 | 18 | 13 | 10 | -22 | 22 | -30 | 10 | 10 | - 1 | - 7 | 10 | -17 | 48 |
| 22 | -60 | 36 | -31 | -45 | -51 | -36 | 21 | 25 | - 0 | - 2 | 38 | -14 | 26 |
| 23 | 63 | - 5 | 5 | 33 | 34 | 1 | 11 | -12 | -10 | 11 | -34 | 21 | -45 |
| 24 | 65 | -11 | 13 | 31 | 28 | - 4 | - 4 | - 5 | -16 | 7 | -22 | 15 | 12 |
| 25 | 31 | -41 | -11 | 50 | 38 | 14 | -30 | -51 | 21 | 22 | -40 | 23 | 3 |
| 26 | 51 | 19 | 7 | -22 | 3 | -27 | 30 | - 2 | -22 | 0 | - 8 | -14 | 38 |
| 27 | 66 | 2 | 15 | 38 | 27 | 18 | 5 | -20 | - 1 | 0 | -32 | 16 | -12 |
| 28 | 24 | -15 | -13 | 16 | 16 | 13 | - 5 | -65 | 9 | 20 | -48 | - 7 | - 7 |
| 29 | 50 | -18 | 4 | 41 | 39 | 18 | 2 | -14 | 4 | 26 | -46 | 15 | -51 |
| 30 | -55 | - 0 | -20 | -18 | -28 | - 9 | -13 | 9 | - 8 | -37 | 30 | 9 | 6 |
| 31 | -31 | -47 | 4 | 35 | 18 | 15 | -55 | - 4 | 12 | 6 | - 6 | 15 | - 9 |
| 32 | 7 | -42 | 11 | 54 | 29 | 14 | -42 | -29 | 1 | 29 | -23 | 13 | - 8 |
| 33 | 14 | -23 | 9 | 39 | 39 | 41 | -19 | -34 | 29 | 44 | -33 | 3 | -43 |
| 34 | 18 | -23 | 10 | 27 | 17 | -28 | -26 | -27 | -10 | 29 | -11 | 21 | 27 |
| 35 | 38 | -13 | 7 | 54 | 42 | 29 | 10 | -28 | 26 | 42 | -48 | 19 | -62 |
| 36 | 8 | 4 | - 9 | 31 | 15 | 25 | -13 | -17 | 19 | 26 | -13 | - 6 | 11 |
| 37 | 15 | -33 | 6 | 11 | 32 | 4 | 9 | 20 | 46 | 0 | -16 | - 8 | -31 |
| 38 | 20 | -38 | 4 | 50 | 37 | 1 | -51 | -36 | - 0 | 21 | -36 | 12 | - 3 |
| 39 | 15 | -45 | 5 | 74 | 28 | 25 | -49 | -42 | - 8 | 19 | -35 | 22 | -26 |
| 40 | -35 | 17 | 12 | 34 | - 9 | 19 | 1 | -19 | 47 | 32 | - 4 | - 1 | -34 |
| 41 | 44 | -28 | 2 | 33 | 30 | - 7 | -20 | - 1 | -20 | 5 | -22 | 18 | 9 |
| 42 | 48 | -13 | -19 | 9 | 23 | 10 | - 4 | 15 | -28 | -15 | -13 | 32 | 4 |
| 43 | -12 | 23 | 26 | -46 | -34 | -12 | 10 | 4 | 7 | - 2 | 14 | -46 | 63 |

Table E1 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 44 | 57 | 13 | -0 | -8 | 14 | -1 | 7 | -3 | -16 | 8 | -7 | -7 | 25 |
| 45 | 63 | -40 | -2 | 59 | 51 | 32 | -19 | -27 | -2 | 17 | -50 | 47 | -56 |
| 46 | 20 | -3 | -5 | 11 | 18 | -15 | 1 | 8 | -16 | -13 | -10 | 56 | -17 |
| 47 | 57 | -4 | 2 | 6 | 37 | -31 | 8 | 5 | -15 | 4 | -8 | 8 | 19 |
| 48 | 47 | -4 | 11 | 5 | 16 | -18 | -4 | 8 | -9 | -6 | 10 | -1 | 44 |
| 49 | -22 | 2 | 26 | -23 | 5 | -26 | -16 | -7 | 29 | 13 | 23 | -40 | 48 |
| 50 | 59 | -7 | -10 | 41 | 29 | 16 | 18 | -1 | -20 | 4 | -41 | 39 | -41 |
| 51 | 2 | 6 | 11 | 38 | 18 | 20 | -1 | -9 | 38 | 20 | -5 | 4 | -27 |
| 52 | 36 | -10 | 4 | -18 | 9 | -8 | 20 | 23 | -19 | -13 | 16 | -12 | 35 |
| 53 | 11 | -23 | -6 | -0 | 20 | -35 | -33 | -1 | -17 | -10 | 8 | 21 | 38 |
| 54 | 38 | -33 | 13 | 45 | 39 | 3 | -46 | -23 | -21 | 11 | -28 | 20 | 11 |
| 55 | 14 | -39 | -8 | 39 | 16 | 9 | -66 | -23 | -11 | 29 | -15 | 30 | 7 |
| 56 | 32 | 16 | -5 | -25 | 5 | -16 | 17 | -2 | -18 | 6 | -17 | -32 | 52 |
| 57 | 21 | -22 | -35 | -12 | 39 | -2 | 4 | 25 | 26 | 2 | -3 | 15 | 14 |
| 58 | 49 | -12 | -4 | 1 | 10 | -14 | -15 | -17 | -30 | -5 | -21 | -12 | 33 |
| 59 | 27 | -14 | 2 | 41 | 21 | -3 | -13 | -11 | 1 | 17 | -31 | 10 | -18 |
| 60 | 63 | -14 | 2 | 22 | 22 | -18 | -19 | -7 | -27 | 1 | -20 | 17 | 17 |
| 61 | 65 | 4 | -11 | 35 | 3 | -10 | 14 | -15 | -21 | 6 | -46 | 29 | -26 |
| 62 | 20 | 14 | 8 | 31 | -12 | -7 | 1 | -19 | 5 | 6 | -6 | 6 | 24 |
| 63 | 37 | -30 | -20 | 34 | 49 | 22 | -19 | -18 | -0 | 15 | -33 | 22 | -17 |
| 64 | 34 | -20 | 28 | 58 | 6 | 21 | -31 | -34 | 19 | 12 | -54 | 15 | -20 |
| 65 | 22 | -37 | -2 | 47 | 36 | 23 | -51 | -54 | 21 | 23 | -36 | 18 | -6 |
| 66 | -11 | -3 | 4 | 29 | -6 | -2 | -31 | -23 | -23 | 8 | -8 | 8 | -10 |
| 67 | 15 | -47 | -1 | 46 | 26 | 25 | -64 | -45 | 9 | 3 | -20 | 39 | -11 |
| 68 | 8 | -19 | 21 | 5 | -1 | 26 | -6 | -37 | 5 | 6 | -19 | -29 | 11 |
| 69 | -6 | 9 | 18 | 22 | 6 | -1 | -20 | 2 | 19 | 2 | -7 | -2 | 13 |
| 70 | 63 | -20 | 3 | 47 | 24 | -3 | -12 | -22 | -8 | 32 | -54 | 34 | -24 |
| 71 | 66 | -2 | 2 | 18 | 57 | 5 | 23 | 8 | 13 | 28 | -25 | 12 | -15 |
| 72 | 31 | -6 | -1 | -7 | 39 | -23 | 11 | 1 | -18 | 4 | -10 | -14 | 45 |
| 73 | 79 | -23 | -5 | 40 | 35 | 14 | -4 | -8 | -20 | -10 | -41 | 42 | -13 |
| 74 | 26 | -37 | -0 | 48 | 36 | 19 | -43 | -37 | 14 | 23 | -20 | 32 | -1 |
| 75 | -30 | -21 | 22 | 8 | -9 | 11 | -42 | -30 | -0 | -5 | 7 | -9 | 7 |
| 76 | 52 | -12 | -13 | 24 | 60 | 10 | 4 | -3 | 2 | 33 | -20 | 23 | 2 |
| 77 | 35 | -11 | 11 | 0 | 12 | -26 | -7 | 3 | -12 | 9 | 8 | -10 | 46 |
| 78 | 25 | -51 | -8 | 60 | 35 | 25 | -56 | -41 | 18 | 18 | -28 | 31 | -7 |
| 79 | 35 | -15 | 5 | 13 | 16 | -7 | -21 | -17 | -9 | 14 | -20 | 11 | 47 |
| 80 | 71 | -3 | 1 | 33 | 53 | 12 | 21 | -7 | -2 | 26 | -30 | 15 | -18 |
| 81 | 20 | -31 | 12 | 43 | 30 | 7 | -13 | -10 | 12 | -1 | -35 | 22 | -28 |
| 82 | -34 | -52 | 5 | 36 | 15 | 18 | -63 | -10 | 12 | 14 | -7 | 9 | -2 |
| 83 | 27 | -15 | 9 | 27 | 28 | 1 | -18 | -20 | 7 | 18 | -12 | 5 | -9 |
| 84 | -3 | 23 | -31 | -52 | -26 | -43 | 10 | 15 | -40 | -17 | 32 | -5 | 53 |
| 85 | -5 | -19 | 18 | 20 | 9 | 15 | -27 | -12 | 45 | 21 | -6 | 5 | 9 |
| 86 | 26 | -25 | 19 | 61 | 44 | 25 | -13 | -43 | 21 | 32 | -44 | 14 | -53 |
| 87 | 26 | -51 | 4 | 78 | 44 | 23 | -63 | -50 | 10 | 24 | -37 | 36 | -31 |
| 88 | -10 | -9 | 10 | 11 | -5 | -13 | -23 | -51 | -2 | -22 | -4 | -6 | 10 |
| 89 | -18 | -12 | 9 | 38 | -2 | 24 | -36 | -28 | 22 | 19 | -2 | 14 | -1 |
| 90 | -27 | 13 | 13 | 16 | -11 | -11 | -19 | -21 | 11 | 9 | 3 | 8 | -15 |

## Table H1 Continued

| | Factor | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 91 | 55 | 12 | -29 | -10 | 27 | -24 | 22 | 13 | -52 | -13 | -17 | 10 | 46 |
| 92 | 66 | -12 | - 1 | 55 | 54 | 23 | 8 | -14 | 7 | 36 | -54 | 31 | -37 |
| 93 | 58 | 12 | - 4 | 1 | 8 | - 6 | 33 | 15 | -25 | 13 | -14 | 1 | 25 |
| 94 | 84 | - 5 | - 7 | 16 | 33 | 6 | 27 | - 3 | 15 | 2 | -31 | 14 | - 3 |
| 95 | 13 | 4 | 2 | -33 | -11 | -36 | - 1 | 6 | 21 | - 8 | 20 | -19 | 71 |
| 96 | 68 | - 4 | -12 | 22 | 20 | -13 | 6 | -11 | -24 | 3 | -33 | 27 | 21 |
| 97 | 72 | -10 | - 8 | 26 | 28 | 14 | 25 | 14 | -12 | -13 | -23 | 33 | -11 |
| 98 | 32 | -28 | -12 | 19 | 32 | 12 | 0 | 7 | - 5 | 1 | -22 | 30 | -46 |
| 99 | - 5 | 20 | - 3 | -33 | -19 | -20 | - 5 | 7 | -16 | - 8 | 15 | -27 | 73 |
| 100 | -49 | - 7 | 21 | -16 | 14 | 19 | -24 | - 2 | 11 | 1 | 16 | -22 | 8 |
| 101 | 43 | -39 | 14 | 41 | 47 | 22 | - 6 | -25 | 21 | 20 | -55 | 19 | -46 |
| 102 | 68 | -18 | -14 | 36 | 49 | - 1 | 14 | -15 | - 6 | 3 | -42 | 22 | -29 |
| 103 | 39 | - 9 | -42 | 7 | 31 | -36 | 2 | - 8 | -44 | -26 | -11 | 22 | 6 |
| 104 | 54 | -11 | -26 | 23 | 33 | 4 | 13 | 5 | -23 | -15 | -30 | 11 | -23 |
| 105 | 39 | 6 | -20 | 20 | 26 | -10 | - 9 | - 9 | -13 | 6 | -20 | 13 | 15 |
| 106 | 26 | 38 | -12 | 9 | 15 | -19 | 12 | 12 | - 9 | -16 | -21 | 5 | - 9 |
| 107 | 73 | - 5 | 16 | 39 | 48 | 7 | 17 | - 1 | - 3 | 8 | -38 | 21 | -21 |
| 108 | 6 | 25 | - 2 | -30 | -24 | - 2 | 15 | 17 | 8 | - 1 | 15 | -12 | 50 |
| 109 | 13 | -41 | -16 | - 8 | 11 | -29 | - 6 | - 4 | -31 | -56 | 6 | 5 | 20 |
| 110 | 42 | -25 | -15 | 36 | 46 | -12 | - 1 | - 2 | -20 | 8 | -33 | 15 | -10 |
| 111 | - 0 | - 4 | -12 | 1 | 10 | -16 | -24 | 9 | -15 | - 9 | 11 | 7 | 19 |
| 112 | 34 | - 6 | 4 | 34 | 36 | 9 | 2 | -22 | 8 | 23 | -68 | 6 | -14 |
| 113 | 27 | -29 | -19 | 55 | 41 | 29 | -17 | -22 | 14 | 17 | -43 | 39 | -27 |
| 114 | 31 | -30 | 12 | 37 | 20 | 15 | 2 | -24 | 2 | 26 | -42 | 19 | -37 |
| 115 | 29 | -27 | - 4 | 48 | 57 | 28 | 13 | - 7 | 22 | 33 | -51 | 28 | -57 |
| 116 | 33 | 13 | 1 | 20 | - 7 | - 5 | 38 | - 3 | 6 | 8 | -24 | - 2 | - 4 |
| 117 | 52 | -15 | - 0 | 34 | 47 | 18 | 0 | -18 | 6 | 10 | -41 | 26 | -48 |
| 118 | 25 | 6 | 37 | 57 | 19 | 60 | -15 | -18 | 23 | 30 | -29 | 17 | -25 |
| 119 | 30 | -44 | 5 | 70 | 28 | 11 | -52 | -40 | 8 | 9 | -41 | 29 | -21 |
| 120 | - 7 | 26 | - 1 | -42 | - 8 | -28 | 3 | 9 | -27 | -10 | 31 | -25 | 79 |
| 121 | 68 | -14 | 4 | 42 | 54 | - 3 | 8 | 13 | -18 | 2 | -36 | 24 | -17 |
| 122 | 37 | - 6 | - 5 | 12 | 40 | 4 | 27 | 12 | - 7 | 16 | -32 | - 7 | -11 |
| 123 | 53 | - 4 | -10 | 54 | 37 | 1 | 8 | - 1 | -24 | 21 | -46 | 40 | -32 |
| 124 | 34 | 10 | - 9 | 19 | -17 | 12 | 13 | -13 | -12 | 34 | -15 | 10 | 6 |
| 125 | 29 | 17 | 1 | 22 | - 5 | 14 | - 2 | 1 | - 6 | 11 | -10 | 15 | 2 |
| 126 | - 2 | -29 | -17 | 30 | 37 | 3 | -31 | 0 | -14 | -11 | 8 | 21 | 0 |
| 127 | -18 | - 8 | - 7 | 5 | -42 | - 5 | 5 | -16 | 19 | - 7 | - 9 | -20 | 4 |
| 128 | 13 | -29 | - 5 | 57 | 41 | 23 | -23 | -23 | 17 | 28 | -21 | 18 | -20 |
| 129 | 36 | -22 | - 6 | 16 | 20 | -32 | -23 | -29 | -18 | 4 | -25 | 3 | 22 |
| 130 | 75 | -15 | -11 | 26 | 49 | -20 | -11 | -18 | -40 | 21 | -48 | 27 | - 5 |
| 131 | 4 | -31 | 20 | 39 | 20 | 15 | -31 | -19 | 39 | 4 | -26 | 2 | -11 |
| 132 | -18 | -12 | 5 | 4 | 8 | 14 | - 5 | - 1 | 16 | 1 | 6 | 12 | 4 |
| 133 | 33 | -48 | 15 | 76 | 42 | 16 | -53 | -35 | 4 | 7 | -46 | 31 | -32 |
| 134 | 9 | 6 | 13 | 33 | 3 | 1 | -20 | -19 | 9 | 30 | 6 | 35 | -07 |
| 135 | -14 | 34 | 8 | -68 | -32 | -11 | 30 | 19 | 7 | - 9 | 28 | -33 | 34 |
| 136 | 49 | -33 | 7 | 58 | 50 | 23 | 4 | -10 | 15 | 11 | -50 | 26 | -56 |
| 137 | 39 | -40 | 2 | 72 | 37 | 26 | -34 | -37 | - 5 | 11 | -50 | 36 | -36 |

Table E1 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 138 | -17 | -16 | 23 | 46 | 2 | 31 | -10 | -17 | 20 | 3 | -22 | 1 | -11 |
| 139 | 27 | -18 | 53 | 23 | 27 | 12 | 2 | -35 | 15 | 27 | -36 | -19 | 13 |
| 140 | - 8 | -29 | 5 | 51 | 8 | 22 | -40 | -28 | 16 | 17 | -22 | 20 | -10 |
| 141 | 27 | -34 | 2 | 32 | 41 | 20 | -16 | - 9 | - 2 | 21 | -38 | 15 | -54 |
| 142 | 9 | -60 | -21 | 1 | 42 | 13 | -19 | 4 | -22 | - 5 | -13 | 3 | - 3 |
| 143 | 74 | 11 | -27 | 9 | 33 | -33 | 13 | 5 | -44 | - 1 | -29 | 22 | 11 |
| 144 | 22 | - 9 | -24 | 3 | 18 | -22 | 5 | 7 | -42 | - 3 | - 6 | 13 | 15 |
| 145 | 37 | -34 | 5 | 47 | 36 | 19 | -17 | -27 | - 4 | 7 | -34 | 37 | -50 |
| 146 | 16 | -49 | -23 | - 4 | 21 | -13 | -36 | - 2 | -31 | -24 | - 4 | 4 | 6 |
| 147 | 68 | -28 | 2 | 56 | 51 | 11 | 8 | -18 | -13 | 23 | -58 | 24 | -29 |
| 148 | 23 | -18 | -35 | 45 | 40 | 24 | -31 | -13 | 8 | -10 | -42 | 16 | -42 |
| 149 | 36 | -15 | -32 | 7 | 43 | 6 | 16 | 3 | - 4 | 14 | -22 | 6 | -31 |
| 150 | 25 | -11 | 2 | 22 | 5 | - 5 | -19 | 1 | -10 | - 0 | 7 | 26 | 5 |
| 151 | 39 | 3 | -36 | -12 | 7 | -51 | - 3 | 6 | -62 | 6 | - 3 | 14 | 34 |
| 152 | 45 | 5 | -10 | - 0 | 9 | -16 | -16 | - 5 | -38 | 1 | -12 | 16 | 32 |
| 153 | 25 | -29 | -21 | 38 | 50 | 2 | -26 | -11 | 6 | 3 | -36 | 21 | - 9 |
| 154 | -12 | 1 | 3 | -26 | -46 | -23 | - 3 | -13 | -23 | 8 | 22 | -21 | 57 |
| 155 | 4 | -41 | -27 | 29 | 26 | - 2 | -40 | - 5 | -36 | 3 | - 9 | 28 | - 5 |
| 156 | 8 | 14 | - 0 | -10 | 18 | 3 | 2 | 18 | - 9 | 9 | 2 | - 4 | 23 |
| 157 | - 1 | -16 | 39 | 56 | 0 | 45 | -11 | -40 | 28 | 28 | -26 | - 4 | -24 |
| 158 | 7 | -24 | - 1 | - 2 | -17 | -22 | -33 | -26 | -18 | -19 | - 6 | - 3 | 19 |
| 159 | 26 | 5 | -35 | 31 | 14 | -21 | - 3 | - 0 | - 0 | -21 | -15 | 40 | -12 |
| 160 | 25 | -24 | - 1 | 58 | 55 | 34 | 5 | -17 | 24 | 28 | -47 | 21 | -60 |
| 161 | 47 | -25 | 13 | 64 | 41 | 27 | 7 | -19 | 27 | 20 | -48 | 35 | -50 |
| 162 | -31 | 14 | 33 | 6 | -25 | 9 | 7 | -14 | 21 | - 2 | - 2 | -14 | 20 |
| 163 | 41 | -40 | -32 | 5 | 42 | 6 | -10 | 13 | -35 | -29 | -21 | 5 | 6 |
| 164 | 0 | 7 | -24 | -23 | 0 | -20 | -12 | 19 | -24 | -19 | 19 | - 7 | 24 |
| 165 | 44 | -51 | 6 | 47 | 57 | 28 | -14 | -21 | 8 | 10 | -45 | 16 | -53 |
| 166 | 17 | -43 | 21 | 61 | 35 | 43 | -30 | -37 | 28 | 36 | -45 | 21 | -40 |
| 167 | - 4 | -14 | -17 | -26 | 14 | -34 | -10 | 7 | -44 | -23 | 22 | - 5 | 34 |
| 168 | 59 | -22 | - 3 | 48 | 55 | 17 | 14 | - 4 | 8 | 3 | -47 | 22 | -64 |
| 169 | 4 | -20 | - 7 | -29 | -13 | -64 | -13 | 2 | -41 | -17 | 1 | - 7 | 40 |
| 170 | -35 | 21 | -10 | -36 | -17 | -28 | -18 | 18 | -23 | -28 | 42 | - 8 | 49 |
| 171 | -41 | -11 | - 6 | -34 | -48 | -35 | -15 | - 1 | -16 | -31 | 29 | -16 | 36 |
| 172 | -34 | 30 | 12 | -10 | - 8 | - 9 | -10 | 29 | - 0 | 10 | 26 | -12 | 27 |
| 173 | 30 | 6 | 9 | 31 | 19 | 14 | -12 | -22 | - 3 | 30 | -17 | - 3 | 17 |
| 174 | 42 | 9 | 4 | 31 | 47 | 32 | 15 | - 4 | 18 | 27 | -36 | 14 | -42 |
| 175 | 48 | -43 | 2 | 50 | 45 | 23 | -39 | -40 | -27 | 33 | -54 | 19 | -28 |
| 176 | 51 | 38 | -10 | -22 | 27 | - 2 | 37 | 5 | -10 | 12 | - 7 | -11 | 12 |
| 177 | 58 | 21 | 13 | 16 | 28 | 2 | 15 | -14 | -19 | 21 | -17 | 1 | 22 |
| 178 | 5 | -46 | -12 | 58 | 39 | 18 | -40 | -15 | - 1 | 4 | -12 | 32 | -18 |
| 179 | 53 | 22 | 10 | 27 | 31 | - 3 | 15 | - 7 | -15 | 18 | - 7 | 27 | 2 |
| 180 | 18 | -19 | -14 | 55 | 35 | 13 | -26 | -18 | -11 | 13 | -31 | 63 | -24 |
| 181 | 6 | -20 | 11 | 56 | 21 | 14 | -26 | -15 | 35 | 6 | -24 | 24 | -13 |
| 182 | 35 | -25 | 31 | 61 | 48 | 28 | -21 | -30 | 7 | 40 | -42 | 20 | -26 |
| 183 | -10 | -36 | -15 | 44 | 1 | 32 | -36 | -25 | 5 | - 8 | -13 | 24 | -10 |
| 184 | 13 | -30 | 5 | 61 | 24 | 22 | -37 | -27 | 6 | 19 | -29 | 27 | -31 |

### Table E1 Continued

| Item | Factor<br>1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 185 | -15 | - 3 | -28 | -28 | -27 | -40 | - 7 | 6 | -45 | -27 | 5 | - 5 | 33 |
| 186 | 19 | - 3 | 7 | 29 | 42 | 30 | - 6 | -17 | - 6 | 18 | -24 | 6 | -28 |
| 187 | 12 | -39 | -10 | 44 | 8 | -14 | -61 | -40 | -13 | 8 | -13 | 34 | - 5 |
| 188 | -18 | - 7 | - 6 | 21 | 8 | 25 | -16 | - 6 | 18 | 20 | -17 | 12 | 1 |
| 189 | 11 | -34 | 6 | 65 | 24 | 29 | -31 | -19 | 2 | 21 | -34 | 38 | -39 |
| 190 | 39 | -20 | 3 | 34 | 24 | -13 | -12 | - 8 | -36 | 19 | -30 | 17 | -13 |
| 191 | 19 | - 3 | 11 | 17 | - 1 | -10 | -23 | -34 | - 6 | 19 | -19 | 3 | 22 |
| 192 | -12 | -19 | 2 | 13 | 13 | 30 | -20 | - 4 | 21 | 8 | -13 | -12 | 0 |
| 193 | 2 | -33 | -29 | 41 | 38 | 19 | -31 | -19 | 2 | 41 | -27 | 24 | - 8 |
| 194 | 15 | -12 | -37 | -11 | 10 | -31 | -17 | 23 | -32 | -35 | 20 | 37 | 20 |
| 195 | 31 | -41 | -16 | 59 | 58 | 25 | -12 | -12 | 8 | 15 | -44 | 28 | -52 |
| 196 | 72 | 6 | -29 | - 6 | 39 | -25 | 22 | 3 | -36 | - 3 | -23 | 6 | 15 |
| 197 | 19 | -17 | -25 | 31 | 16 | 1 | - 2 | -13 | -34 | 7 | -17 | 27 | -11 |
| 198 | 44 | -11 | -31 | 47 | 56 | 13 | 12 | - 1 | 10 | 22 | -42 | 33 | -35 |
| 199 | 70 | -34 | -19 | 37 | 53 | 12 | -11 | -29 | -26 | 31 | -53 | 18 | -15 |
| 200 | 36 | 15 | -10 | 20 | 14 | - 5 | 10 | 0 | - 2 | 7 | - 2 | 26 | -25 |
| 201 | -18 | 44 | -24 | -39 | -38 | -22 | 37 | 10 | - 5 | 4 | 3 | -29 | 13 |
| 202 | 68 | 12 | 0 | 4 | 45 | - 6 | 31 | 3 | -16 | 11 | -16 | 7 | - 8 |
| 203 | -11 | - 6 | -27 | -23 | - 9 | -20 | 2 | 16 | -30 | -14 | 9 | - 2 | 31 |
| 204 | 28 | - 2 | 16 | -33 | 22 | -35 | 5 | 6 | - 8 | 14 | 6 | -29 | 62 |
| 205 | 71 | -13 | 9 | 46 | 49 | 25 | 5 | -20 | 18 | 6 | -36 | 29 | -37 |
| 206 | 66 | -13 | 20 | 46 | 43 | 19 | - 9 | -20 | - 6 | 1 | -29 | 22 | - 7 |
| 207 | 45 | -23 | 5 | 36 | 38 | 5 | - 4 | -21 | -25 | 23 | -51 | 18 | 7 |
| 208 | 49 | 12 | -10 | -26 | 41 | -14 | 34 | - 5 | -18 | 9 | -22 | -24 | 34 |
| 209 | 56 | - 0 | - 2 | - 7 | 51 | -10 | 12 | - 1 | -11 | 24 | -17 | - 1 | 13 |
| 210 | 11 | 19 | 17 | -40 | -12 | -33 | 5 | - 8 | -19 | 4 | 17 | -42 | 62 |
| 211 | 23 | 18 | 5 | 44 | -17 | 19 | - 5 | -37 | 4 | 9 | - 8 | 16 | -27 |
| 212 | 37 | -20 | 12 | 36 | 8 | - 4 | -20 | -21 | -23 | -10 | -16 | 25 | 8 |
| 213 | 56 | -13 | 15 | 55 | 43 | 14 | - 3 | -16 | 1 | 5 | -24 | 32 | -19 |
| 214 | 54 | 9 | 19 | 60 | 11 | 23 | 8 | -31 | 14 | 24 | -41 | 20 | -34 |
| 215 | - 5 | 14 | -12 | -57 | -12 | -39 | - 3 | 12 | -38 | - 6 | 26 | -16 | 54 |
| 216 | 47 | 22 | 8 | 44 | 7 | 20 | 30 | -17 | 11 | 13 | -41 | 7 | -27 |
| 217 | - 6 | - 9 | 9 | 12 | 2 | 20 | 12 | -19 | - 1 | - 4 | -12 | -49 | - 5 |
| 218 | 29 | 20 | - 2 | 32 | -13 | 1 | 24 | - 0 | 6 | -12 | -18 | 17 | -20 |
| 219 | - 1 | 43 | - 5 | -26 | -21 | -32 | 24 | 8 | -19 | - 1 | 23 | -22 | 60 |
| 220 | 24 | -27 | 37 | 71 | 23 | 44 | -29 | -27 | 29 | 26 | -35 | 22 | -25 |
| 221 | 76 | - 2 | 3 | 18 | 49 | 3 | 26 | -13 | -11 | 12 | -30 | 1 | - 9 |
| 222 | 30 | -28 | - 6 | - 2 | 57 | 4 | -10 | - 9 | -10 | 23 | -13 | -19 | 37 |
| 223 | 74 | 9 | 3 | 24 | 42 | 11 | 13 | - 3 | 10 | 18 | -27 | 12 | 12 |
| 224 | 73 | -30 | - 2 | 53 | 46 | 22 | -11 | -25 | 2 | 12 | -42 | 42 | -28 |
| 225 | 64 | -11 | 18 | 63 | 47 | 41 | 3 | -25 | 16 | 27 | -44 | 32 | -47 |
| 226 | 35 | -31 | 11 | 19 | 78 | 17 | - 7 | - 3 | - 4 | - 1 | -21 | - 8 | 8 |
| 227 | 42 | - 3 | - 2 | - 9 | 50 | - 5 | 19 | 7 | 3 | 8 | - 1 | -25 | 35 |
| 228 | 18 | 12 | 2 | - 3 | - 0 | -17 | - 1 | 3 | 2 | 8 | 7 | - 5 | 52 |
| 229 | 56 | 17 | 9 | 31 | 7 | 6 | 10 | -20 | - 7 | - 2 | -28 | 18 | 9 |
| 230 | 53 | - 3 | -10 | - 4 | 51 | -12 | 19 | - 3 | -15 | 15 | -21 | -21 | 27 |
| 231 | 7 | -30 | 7 | 55 | 11 | 32 | -47 | -24 | - 2 | - 2 | - 3 | 38 | - 6 |

Table E1 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 232 | 8 | 6 | 17 | 64 | - 5 | 18 | -14 | -11 | 5 | 11 | -23 | 23 | -13 |
| 233 | 12 | -43 | 11 | 66 | 29 | 49 | -28 | -34 | 14 | 17 | -38 | 23 | -42 |
| 234 | 6 | -22 | 10 | 56 | 14 | 33 | -20 | -12 | 26 | 13 | -17 | 20 | -20 |
| 235 | 53 | -23 | 15 | 76 | 32 | 30 | - 1 | -29 | 1 | 14 | -49 | 24 | -38 |
| 236 | 6 | -18 | 17 | 43 | - 3 | 11 | -39 | -36 | 8 | 20 | - 7 | 22 | - 5 |
| 237 | 7 | 17 | 15 | 34 | -31 | 6 | - 8 | -33 | 11 | 5 | - 2 | 10 | 7 |
| 238 | 31 | -43 | 14 | 68 | 31 | 44 | -32 | -31 | 9 | 15 | -25 | 30 | -23 |
| 239 | 1 | -33 | 17 | 72 | 17 | 46 | -20 | -21 | 35 | 12 | -23 | 21 | -51 |
| 240 | 25 | -46 | 22 | 52 | 31 | 30 | -27 | -30 | -11 | 9 | -40 | 8 | -37 |
| 241 | 4 | - 2 | 7 | -24 | 15 | -13 | - 9 | 2 | 0 | - 6 | 9 | -27 | 71 |
| 242 | 14 | -38 | 9 | 35 | 35 | 3 | -55 | -21 | - 1 | 11 | - 9 | 21 | 15 |
| 243 | 30 | 3 | - 6 | 35 | -16 | 18 | 6 | -22 | 8 | 2 | -21 | 37 | -54 |
| 244 | 45 | 34 | -28 | - 2 | - 4 | -27 | 31 | 9 | -14 | - 0 | - 9 | 26 | - 8 |
| 245 | 36 | 26 | 8 | 19 | -21 | -10 | 10 | -20 | - 4 | 5 | -18 | 4 | 22 |
| 246 | 41 | -15 | 6 | 61 | 29 | 28 | - 9 | -17 | 18 | 7 | -40 | 52 | -61 |
| 247 | 27 | -30 | 8 | 46 | 55 | 48 | -19 | -23 | 3 | 18 | -26 | 5 | 5 |
| 248 | 11 | -14 | 3 | -17 | 21 | 11 | - 8 | -30 | - 9 | 26 | -12 | -33 | 43 |
| 249 | -42 | 20 | 12 | -47 | -39 | -35 | -11 | - 4 | -14 | 7 | 38 | -35 | 59 |
| 250 | -26 | 4 | 3 | -26 | 26 | - 5 | -14 | 15 | 10 | 14 | 21 | 15 | 14 |
| 251 | -32 | -27 | 8 | 2 | - 5 | 10 | -28 | -17 | - 5 | - 1 | -13 | -11 | 8 |
| 252 | 12 | -49 | 18 | 43 | 45 | 34 | -39 | -23 | 6 | 10 | -11 | 23 | - 7 |
| 253 | 11 | -30 | -16 | - 0 | 36 | 1 | - 8 | -26 | -25 | 25 | -20 | -31 | 45 |
| 254 | 55 | 10 | 0 | 26 | 34 | 1 | 13 | - 7 | - 6 | 8 | -19 | 25 | 8 |
| 255 | 18 | -43 | - 9 | 32 | 47 | 16 | -38 | -10 | -20 | 3 | -21 | 13 | 16 |
| 256 | 26 | -36 | 8 | 40 | 37 | 10 | -58 | -24 | - 2 | 23 | -18 | 4 | 28 |
| 257 | 56 | -22 | -26 | 51 | 21 | 9 | - 1 | -15 | -28 | -13 | -40 | 55 | -33 |
| 258 | 55 | - 6 | 13 | 45 | 33 | 9 | 7 | -17 | - 4 | 14 | -37 | 11 | - 9 |
| 259 | 24 | 5 | -20 | 1 | 0 | 12 | - 4 | -26 | -34 | - 2 | -15 | 10 | 51 |
| 260 | 47 | -20 | -26 | 0 | 29 | - 8 | -12 | - 8 | -19 | - 8 | -22 | 15 | 9 |
| 261 | 63 | -14 | 14 | 60 | 27 | 19 | 4 | -30 | - 0 | 12 | -55 | 27 | -53 |
| 262 | 48 | -44 | -10 | 56 | 38 | 1 | -15 | -20 | - 5 | - 7 | -47 | 30 | -21 |
| 263 | 44 | 27 | 11 | 46 | - 3 | 24 | 15 | -13 | 6 | 19 | -24 | 11 | -17 |
| 264 | 30 | 8 | 2 | 12 | -22 | - 2 | 8 | -19 | -15 | 5 | - 9 | -14 | 11 |
| 265 | 3 | 20 | -26 | -40 | - 4 | -44 | 6 | 12 | -17 | -28 | 20 | -16 | 66 |
| 266 | - 9 | 7 | - 3 | -50 | - 7 | -26 | - 5 | 7 | -34 | 3 | 32 | -33 | 69 |
| 267 | 71 | -14 | - 8 | 44 | 35 | 7 | 10 | -30 | - 4 | 5 | -41 | 23 | -17 |
| 268 | 69 | -11 | 13 | 39 | 14 | 22 | -14 | -31 | - 5 | 20 | -42 | 15 | -19 |
| 269 | -24 | - 2 | -26 | -25 | -12 | -25 | - 5 | - 4 | -16 | -26 | 22 | 7 | 23 |
| 270 | 64 | -22 | 12 | 63 | 35 | 37 | 7 | -25 | 20 | 15 | -55 | 24 | -62 |
| 271 | 37 | -40 | -13 | 48 | 75 | 45 | -12 | -30 | - 5 | - 3 | -42 | 23 | -31 |
| 272 | 60 | -18 | 15 | 61 | 35 | 18 | -20 | -31 | 5 | 28 | -43 | 14 | - 6 |
| 273 | 14 | -16 | - 5 | 16 | 10 | 12 | -16 | -11 | -11 | 5 | -19 | - 9 | 18 |
| 274 | 73 | -28 | 3 | 38 | 54 | 34 | - 9 | -28 | - 7 | 2 | -47 | 5 | 0 |
| 275 | 33 | -41 | 3 | 37 | 68 | 36 | -18 | -25 | 23 | 9 | -31 | 6 | - 7 |
| 276 | 43 | -23 | - 6 | 51 | 63 | 32 | 11 | -16 | 12 | 11 | -44 | 33 | -59 |
| 277 | 51 | -41 | - 9 | 22 | 72 | 24 | 5 | - 8 | 8 | 19 | -30 | -11 | - 7 |
| 278 | 26 | 28 | 20 | 20 | 6 | - 3 | 3 | - 7 | -10 | 9 | - 2 | 35 | 7 |

Table El Continued

| Item | Factor<br>1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 279 | -35 | 14 | -35 | -32 | -21 | -41 | - 4 | 13 | -25 | - 7 | 17 | -13 | 46 |
| 280 | 25 | 1 | - 2 | 19 | 38 | - 4 | 35 | 17 | 20 | 16 | - 7 | 10 | -38 |
| 281 | - 7 | -26 | 12 | 52 | -10 | 11 | -32 | -28 | 10 | - 4 | -16 | 24 | -14 |
| 282 | 16 | 4 | 28 | 49 | - 8 | 7 | -16 | -28 | 21 | 20 | -15 | 14 | - 6 |
| 283 | - 6 | -24 | -17 | 35 | 31 | - 1 | -33 | -14 | - 1 | 5 | 4 | 39 | -11 |
| 284 | 4 | 22 | -22 | -38 | 1 | -45 | 12 | 30 | -17 | -30 | 18 | 27 | 21 |
| 285 | 39 | -44 | -11 | 63 | 39 | 8 | -44 | -23 | -18 | 2 | -37 | 41 | - 8 |
| 286 | -30 | -33 | 4 | 38 | 11 | 19 | -35 | -11 | 15 | 5 | -15 | 17 | 2 |
| 287 | 17 | -23 | 1 | 35 | 30 | 39 | - 2 | -22 | 10 | 4 | -35 | 8 | -53 |
| 288 | - 2 | 20 | -10 | -42 | - 8 | -23 | 12 | 4 | 2 | -10 | 11 | -24 | 41 |
| 289 | 6 | 23 | - 7 | -65 | - 1 | -49 | 19 | 17 | -23 | -14 | 19 | -17 | 50 |
| 290 | 5 | 18 | -27 | -35 | - 5 | -36 | 27 | 18 | -27 | -21 | - 1 | - 3 | 15 |
| 291 | 31 | 6 | 29 | 31 | - 1 | - 1 | -12 | -10 | 7 | - 5 | 8 | 20 | 22 |
| 292 | - 2 | 21 | -22 | -17 | -26 | -45 | 4 | - 2 | -32 | 2 | - 7 | 11 | 45 |
| 293 | -10 | 14 | -12 | -27 | - 2 | -34 | - 1 | 3 | - 8 | - 5 | 7 | -16 | 58 |
| 294 | -25 | -30 | 9 | 31 | - 4 | 47 | -39 | -16 | 19 | 8 | 4 | 6 | 1 |
| 295 | 54 | -34 | 2 | 49 | 38 | 16 | 6 | -17 | 3 | 9 | -49 | 37 | -63 |
| 296 | 34 | 21 | 24 | 33 | - 8 | - 9 | - 3 | -28 | 5 | 8 | - 9 | 18 | 10 |
| 297 | - 1 | 7 | 11 | -31 | 8 | -25 | 0 | 14 | - 2 | - 6 | 11 | -17 | 44 |
| 298 | -22 | 9 | -17 | -16 | 0 | -22 | - 8 | 8 | -18 | - 5 | 25 | 3 | 52 |
| 299 | 18 | 9 | - 6 | 32 | -18 | 10 | 26 | -15 | 4 | - 1 | -29 | 18 | -44 |
| 300 | 0 | -15 | - 2 | -19 | 43 | - 6 | 5 | - 8 | -11 | 26 | - 7 | -34 | 31 |

Table E2

Correlation of all JCES Item Percents and Factor Scores from Principal-Component-Varimax Analysis of Items 2, 5, 8, ---, 299

| | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 38 | 20 | 44 | 26 | 21 | 17 | -14 | 9 | -12 | 8 |
| 2 | 10 | -23 | -15 | -18 | 44 | -50 | 13 | 32 | 10 | -25 |
| 3 | 11 | -16 | 8 | 18 | - 6 | -10 | 14 | 56 | -23 | 23 |
| 4 | -58 | 47 | - 2 | - 3 | 7 | 16 | -34 | -13 | -30 | - 7 |
| 5 | 29 | -14 | 7 | - 6 | 31 | -21 | 3 | 44 | 9 | 3 |
| 6 | 31 | 3 | 49 | 23 | 28 | 26 | -10 | 14 | - 3 | 30 |
| 7 | - 5 | 1 | - 2 | 10 | - 8 | - 6 | 1 | 35 | -30 | 5 |
| 8 | -62 | 65 | 10 | 16 | 20 | 34 | -48 | -32 | -33 | - 3 |
| 9 | 54 | -14 | 54 | 4 | 8 | -11 | 12 | 39 | 32 | 17 |
| 10 | -13 | 25 | 29 | -11 | 4 | 1 | - 9 | -16 | -24 | 8 |
| 11 | 25 | -26 | 21 | 12 | 16 | -23 | 30 | 53 | 6 | 49 |
| 12 | 10 | 2 | 9 | 3 | 3 | -17 | 12 | 18 | - 9 | 16 |
| 13 | 11 | -20 | - 5 | -17 | 18 | -38 | 24 | 22 | 15 | -11 |
| 14 | 61 | -50 | 21 | -22 | 29 | -32 | 18 | 35 | 45 | 3 |
| 15 | 26 | -29 | 36 | - 5 | 1 | -31 | 19 | 55 | 11 | 52 |
| 16 | 14 | 3 | 67 | 2 | 25 | 15 | -22 | 22 | 9 | 43 |
| 17 | 64 | -71 | 19 | -37 | - 6 | -65 | 47 | 69 | 42 | 9 |
| 18 | 55 | -43 | 48 | -18 | 9 | -24 | 9 | 63 | 39 | 32 |
| 19 | 25 | -23 | 43 | 6 | 8 | 8 | 3 | 32 | 7 | 46 |
| 20 | -22 | - 1 | 22 | 17 | - 1 | -10 | -14 | 33 | -14 | 49 |
| 21 | -22 | 44 | 33 | 7 | 10 | 17 | -52 | -10 | -11 | 2 |
| 22 | -50 | 17 | -54 | - 5 | -31 | 8 | -13 | -46 | -12 | -16 |
| 23 | 54 | -23 | 63 | 11 | 4 | - 2 | - 5 | 29 | 22 | 23 |
| 24 | 14 | - 1 | 69 | 0 | 30 | 1 | -22 | 31 | 0 | 31 |
| 25 | 22 | -15 | 30 | 9 | 8 | -34 | 8 | 62 | 7 | 30 |
| 26 | -18 | 34 | 54 | 0 | 32 | 42 | -40 | -17 | - 1 | 26 |
| 27 | 37 | -23 | 71 | -13 | 37 | - 7 | 4 | 33 | 20 | 29 |
| 28 | 20 | - 1 | 18 | 3 | 30 | - 6 | 15 | 22 | 20 | 12 |
| 29 | 68 | -32 | 46 | - 5 | 1 | -12 | 10 | 35 | 31 | 33 |
| 30 | -34 | 1 | -58 | 5 | -33 | 13 | 24 | -17 | -29 | 1 |
| 31 | 7 | -22 | -30 | 4 | -15 | -34 | 18 | 36 | 1 | - 9 |
| 32 | 15 | -22 | 12 | - 6 | -12 | - 7 | 22 | 62 | 19 | 23 |
| 33 | 62 | -28 | 15 | -13 | 11 | -43 | 35 | 44 | 33 | - 8 |
| 34 | - 5 | - 0 | 29 | -18 | 2 | - 2 | - 4 | 40 | - 8 | 31 |
| 35 | 80 | -46 | 41 | -23 | - 1 | -31 | 31 | 46 | 64 | 19 |
| 36 | 1 | - 9 | 21 | -20 | 20 | -29 | 7 | 35 | 16 | 15 |
| 37 | 35 | - 4 | 13 | 13 | - 2 | -11 | 4 | 8 | 20 | - 3 |
| 38 | 15 | -12 | 24 | 2 | 4 | -15 | - 6 | 62 | 8 | 19 |
| 39 | 30 | -44 | 15 | -11 | 0 | -21 | 39 | 70 | 22 | 22 |
| 40 | 24 | -43 | -17 | -46 | -16 | -38 | 37 | 24 | 46 | -11 |
| 41 | 9 | - 7 | 49 | 11 | 10 | 5 | -41 | 37 | - 6 | 36 |
| 42 | 10 | 2 | 34 | 25 | 9 | - 9 | -17 | 9 | -21 | 22 |

Table E2 Continued

| | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 43 | -55 | 47 | -14 | -10 | 42 | 16 | -34 | -37 | -20 | -27 |
| 44 | 1 | 31 | 55 | - 1 | 41 | 12 | -39 | - 3 | -25 | - 3 |
| 45 | 72 | -40 | 51 | 15 | - 1 | -27 | 21 | 58 | 18 | 28 |
| 46 | 14 | -13 | 22 | 15 | -28 | 0 | 7 | 11 | -16 | 23 |
| 47 | 9 | 18 | 68 | 11 | 5 | 22 | -53 | 15 | - 7 | 35 |
| 48 | -18 | 26 | 54 | - 1 | 24 | 13 | -54 | 11 | -16 | 21 |
| 49 | -34 | 47 | - 6 | - 7 | 9 | 14 | -36 | - 7 | -11 | -20 |
| 50 | 53 | -43 | 56 | 11 | 0 | -21 | 24 | 29 | 29 | 42 |
| 51 | 38 | -40 | 17 | -41 | -10 | -38 | 12 | 36 | 51 | - 4 |
| 52 | -15 | 30 | 38 | 6 | 24 | 20 | -30 | -10 | -17 | 12 |
| 53 | -29 | 27 | 16 | 23 | - 9 | 33 | -20 | 15 | -49 | 23 |
| 54 | 9 | - 5 | 40 | 10 | 3 | 1 | -13 | 53 | - 8 | 36 |
| 55 | 6 | -15 | 15 | -10 | 7 | - 7 | 12 | 53 | -24 | 17 |
| 56 | -26 | 45 | 31 | 14 | 44 | 20 | -57 | -19 | - 8 | 23 |
| 57 | - 1 | 31 | 11 | 37 | -22 | 3 | - 7 | - 7 | -25 | 24 |
| 58 | -10 | 26 | 42 | 21 | 35 | 31 | -40 | 9 | -17 | 28 |
| 59 | 33 | -38 | 34 | -11 | 6 | -18 | - 5 | 43 | 27 | 52 |
| 60 | 3 | 7 | 67 | 12 | 23 | 24 | -44 | 31 | -18 | 42 |
| 61 | 36 | -33 | 53 | -13 | 26 | - 3 | 1 | 24 | 22 | 45 |
| 62 | -18 | -23 | 34 | -38 | 26 | - 8 | -13 | 33 | 14 | 29 |
| 63 | 38 | - 7 | 36 | 16 | 8 | -18 | 21 | 40 | - 1 | 36 |
| 64 | 30 | -46 | 30 | -15 | 42 | -28 | 8 | 54 | 29 | 16 |
| 65 | 25 | -11 | 23 | 0 | 21 | -27 | 12 | 62 | - 1 | 8 |
| 66 | 5 | -28 | - 9 | -27 | - 1 | -23 | 10 | 34 | 3 | - 6 |
| 67 | 19 | -18 | 6 | 9 | 0 | -13 | 19 | 55 | - 8 | 14 |
| 68 | - 0 | 8 | - 1 | - 5 | 62 | - 4 | 8 | 5 | 12 | -18 |
| 69 | - 7 | -15 | 8 | -19 | 13 | -30 | -16 | 22 | 21 | - 7 |
| 70 | 45 | -31 | 52 | -15 | 26 | -13 | - 4 | 43 | 20 | 35 |
| 71 | 47 | 3 | 71 | 7 | 6 | -10 | -27 | 20 | 26 | 19 |
| 72 | -13 | 42 | 39 | 19 | 15 | 7 | -31 | 0 | - 2 | 24 |
| 73 | 37 | -22 | 66 | 13 | 22 | - 9 | -17 | 38 | 1 | 41 |
| 74 | 25 | -14 | 30 | 4 | - 6 | -39 | - 3 | 63 | - 0 | 16 |
| 75 | -18 | 3 | -32 | - 3 | 10 | 13 | 17 | 19 | -20 | -21 |
| 76 | 35 | 4 | 57 | 2 | 6 | -22 | -30 | 30 | 18 | 28 |
| 77 | -22 | 33 | 46 | - 5 | 17 | 16 | -50 | 13 | -18 | 17 |
| 78 | 25 | -22 | 25 | 5 | 9 | -34 | 6 | 71 | - 1 | 24 |
| 79 | -15 | 16 | 36 | - 2 | 36 | - 5 | -22 | 26 | -15 | 16 |
| 80 | 50 | - 9 | 80 | - 0 | - 1 | -15 | -12 | 32 | 32 | 27 |
| 81 | 35 | -40 | 21 | - 8 | -11 | -23 | 2 | 47 | 28 | 25 |
| 82 | 3 | -17 | -34 | 4 | - 7 | -37 | 18 | 39 | - 3 | -14 |
| 83 | 21 | - 2 | 31 | -16 | -16 | 1 | -18 | 37 | 15 | 13 |
| 84 | -53 | 51 | - 3 | 25 | 7 | 45 | -35 | -41 | -52 | 19 |
| 85 | 6 | - 4 | - 2 | - 4 | 19 | -34 | 6 | 25 | 7 | - 6 |
| 86 | 66 | -42 | 32 | -10 | -12 | -20 | 45 | 57 | 49 | 23 |
| 87 | 44 | -44 | 29 | -14 | - 4 | -32 | 31 | 85 | 16 | 28 |
| 88 | -12 | - 8 | -13 | -17 | 14 | - 2 | 5 | 14 | - 5 | - 1 |

## Table E 2 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 89 | 6 | -32 | -15 | -45 | 7 | -45 | 34 | 44 | 5 | -14 |
| 90 | - 0 | -16 | -16 | -11 | -29 | 5 | 20 | 19 | 6 | - 5 |
| 91 | -16 | 29 | 52 | 21 | 12 | 13 | -28 | - 7 | -19 | 45 |
| 92 | 70 | -37 | 69 | -16 | 15 | -33 | 5 | 52 | 39 | 39 |
| 93 | - 2 | 14 | 59 | - 1 | 29 | 12 | -32 | - 4 | - 1 | 30 |
| 94 | 33 | 2 | 76 | 9 | 29 | 7 | -22 | 14 | 10 | 36 |
| 95 | -58 | 53 | 16 | 11 | 35 | 34 | -47 | -20 | -44 | 6 |
| 96 | 7 | - 3 | 67 | 10 | 46 | 3 | -16 | 25 | - 7 | 46 |
| 97 | 32 | -17 | 63 | 5 | 20 | - 5 | - 9 | 16 | 7 | 44 |
| 98 | 55 | -23 | 18 | 25 | - 7 | - 5 | 17 | 19 | - 3 | 27 |
| 99 | -61 | 48 | - 3 | - 7 | 24 | 17 | -41 | -23 | -35 | 5 |
| 100 | -14 | 24 | -44 | 7 | -19 | 3 | 7 | -11 | - 4 | -26 |
| 101 | 68 | -28 | 36 | 19 | 22 | -27 | 11 | 41 | 41 | 16 |
| 102 | 53 | -18 | 64 | 13 | 2 | 2 | 1 | 32 | 21 | 40 |
| 103 | 7 | 7 | 37 | 25 | - 3 | 3 | -15 | 10 | -22 | 38 |
| 104 | 37 | -13 | 48 | 25 | 19 | 7 | 4 | 9 | 11 | 38 |
| 105 | 6 | 0 | 49 | 7 | 13 | - 5 | -10 | 24 | 2 | 32 |
| 106 | 8 | - 2 | 33 | -10 | 1 | 7 | - 8 | 1 | 2 | 25 |
| 107 | 48 | -17 | 78 | - 4 | 5 | 1 | - 1 | 33 | 29 | 38 |
| 108 | -35 | 25 | 8 | -11 | 45 | -10 | -42 | -27 | -18 | -17 |
| 109 | -17 | 14 | 3 | 43 | 20 | 35 | -16 | - 1 | -30 | 24 |
| 110 | 28 | -16 | 47 | 32 | -22 | 10 | - 3 | 42 | 22 | 59 |
| 111 | -20 | 19 | 10 | 16 | -23 | 33 | 1 | 10 | -28 | 17 |
| 112 | 36 | -18 | 34 | 6 | 21 | -25 | 16 | 30 | 35 | 20 |
| 113 | 49 | -45 | 27 | - 6 | 6 | -61 | 20 | 54 | 26 | 30 |
| 114 | 51 | -40 | 20 | 2 | 33 | -35 | 18 | 32 | 42 | 22 |
| 115 | 74 | -42 | 29 | - 5 | -17 | -47 | 29 | 43 | 51 | 25 |
| 116 | 19 | -33 | 36 | -19 | 29 | -20 | -18 | 9 | 53 | 34 |
| 117 | 67 | -26 | 46 | - 4 | - 1 | -16 | 6 | 34 | 19 | 20 |
| 118 | 42 | -43 | 31 | -49 | 12 | -38 | 32 | 46 | 40 | - 3 |
| 119 | 33 | -43 | 26 | 1 | 9 | -29 | 22 | 72 | 20 | 33 |
| 120 | -71 | 69 | 2 | 9 | 7 | 32 | -38 | -33 | -42 | - 4 |
| 121 | 40 | -16 | 73 | 14 | -12 | 6 | 0 | 37 | 19 | 54 |
| 122 | 28 | 5 | 41 | 41 | -15 | -14 | 10 | 9 | 35 | 25 |
| 123 | 44 | -42 | 57 | - 4 | -15 | -17 | 19 | 43 | 31 | 55 |
| 124 | 5 | -17 | 34 | -17 | 19 | - 5 | -11 | 14 | 23 | 30 |
| 125 | 3 | -19 | 30 | -45 | 29 | -22 | -13 | 15 | 4 | 4 |
| 126 | 4 | - 3 | 3 | 11 | -33 | -11 | 11 | 28 | -14 | 24 |
| 127 | -15 | -23 | -25 | - 5 | 17 | - 3 | -12 | 4 | 10 | 2 |
| 128 | 35 | -30 | 20 | -13 | - 8 | -50 | 55 | 60 | 30 | 28 |
| 129 | - 3 | 12 | 36 | 22 | 25 | 15 | -14 | 23 | - 9 | 28 |
| 130 | 31 | 8 | 72 | 30 | 8 | 14 | -18 | 30 | - 0 | 51 |
| 131 | 18 | -24 | - 1 | 1 | 0 | -22 | 3 | 46 | 17 | 3 |
| 132 | - 6 | 5 | -23 | - 4 | -12 | -25 | 18 | 6 | - 3 | - 9 |
| 133 | 39 | -44 | 31 | - 3 | - 2 | -19 | 19 | 73 | 21 | 37 |
| 134 | 13 | -26 | 18 | -54 | -21 | -20 | 7 | 38 | - 6 | 10 |
| 135 | -38 | 51 | -17 | 10 | 19 | 25 | -32 | -60 | -24 | -38 |

Table E2 Continued

| Item | Factor 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 136 | 70 | -47 | 42 | - 2 | - 4 | -20 | 13 | 49 | 45 | 39 |
| 137 | 49 | -52 | 36 | -14 | 6 | -30 | 25 | 71 | 25 | 37 |
| 138 | 8 | -42 | -14 | -25 | 1 | -39 | 30 | 37 | 43 | 11 |
| 139 | 11 | 5 | 31 | -12 | 25 | -13 | - 1 | 28 | 28 | - 1 |
| 140 | 14 | -40 | - 8 | -23 | 3 | -32 | 19 | 55 | 22 | 14 |
| 141 | 57 | -21 | 17 | 18 | -12 | - 9 | 23 | 31 | 10 | 5 |
| 142 | 14 | 21 | - 8 | 56 | - 2 | 2 | 4 | 3 | -20 | 13 |
| 143 | 11 | 14 | 77 | 26 | 7 | 24 | -34 | 9 | - 5 | 59 |
| 144 | -13 | 13 | 23 | 27 | 2 | 18 | - 1 | 6 | -16 | 36 |
| 145 | 55 | -38 | 30 | 3 | - 1 | -14 | 10 | 43 | 18 | 16 |
| 146 | - 6 | 22 | - 2 | 67 | 3 | 37 | -24 | 8 | -43 | 16 |
| 147 | 57 | -34 | 66 | 6 | 21 | -17 | 5 | 51 | 42 | 52 |
| 148 | 47 | -32 | 16 | 8 | 0 | -39 | 24 | 39 | 16 | 12 |
| 149 | 51 | 0 | 37 | 30 | -12 | 2 | 17 | 10 | 17 | 23 |
| 150 | 1 | - 8 | 30 | - 4 | - 9 | 11 | -19 | 23 | -15 | 27 |
| 151 | -22 | 30 | 36 | 30 | 0 | 34 | -28 | - 3 | -39 | 43 |
| 152 | -15 | 22 | 46 | 15 | 44 | 13 | -24 | 5 | -35 | 15 |
| 153 | 28 | - 9 | 24 | 17 | - 3 | -33 | - 7 | 42 | 6 | 41 |
| 154 | -58 | 28 | -12 | 4 | 14 | 29 | -21 | -17 | -24 | 0 |
| 155 | 3 | - 6 | - 3 | 17 | -45 | - 3 | 10 | 34 | -20 | 24 |
| 156 | -10 | 27 | 12 | - 3 | - 4 | -16 | -14 | - 8 | - 8 | - 5 |
| 157 | 27 | -47 | 3 | -32 | 11 | -36 | 47 | 50 | 47 | 1 |
| 158 | -19 | 2 | - 2 | 16 | 41 | 40 | -25 | 11 | -35 | 9 |
| 159 | 15 | -29 | 27 | - 9 | 6 | - 5 | - 0 | 26 | - 8 | 44 |
| 160 | 78 | -49 | 26 | -14 | -14 | -47 | 40 | 48 | 53 | 17 |
| 161 | 76 | -64 | 45 | -20 | 8 | -43 | 11 | 54 | 57 | 38 |
| 162 | -26 | -13 | -23 | -30 | 11 | -23 | 7 | 3 | 26 | - 8 |
| 163 | 7 | 18 | 27 | 39 | 8 | 16 | -15 | 6 | -25 | 33 |
| 164 | -27 | 32 | 0 | 16 | 0 | 13 | -16 | -18 | -52 | - 4 |
| 165 | 71 | -30 | 31 | 12 | 9 | -20 | 17 | 44 | 28 | 20 |
| 166 | 53 | -59 | 20 | -21 | - 0 | -47 | 38 | 78 | 51 | 22 |
| 167 | -38 | 53 | - 5 | 46 | -26 | 50 | - 3 | -15 | -49 | 24 |
| 168 | 62 | -33 | 52 | - 1 | 4 | -17 | 3 | 39 | 30 | 38 |
| 169 | -40 | 34 | - 3 | 43 | 7 | 41 | -42 | -16 | -38 | 13 |
| 170 | -63 | 49 | -28 | 7 | -26 | 31 | - 3 | -30 | -63 | -24 |
| 171 | -56 | 15 | -49 | 25 | 8 | 36 | -17 | -24 | -40 | - 8 |
| 172 | -38 | 22 | -15 | 3 | -17 | - 5 | - 2 | - 6 | -18 | -13 |
| 173 | 5 | - 2 | 45 | -34 | 21 | -24 | 19 | 39 | 14 | 15 |
| 174 | 60 | -17 | 44 | -18 | 5 | -38 | 24 | 21 | 33 | 5 |
| 175 | 48 | -23 | 40 | 12 | 19 | -16 | 14 | 52 | 11 | 27 |
| 176 | 10 | 38 | 55 | - 7 | 18 | 1 | -26 | -22 | - 4 | 6 |
| 177 | 4 | 18 | 69 | -16 | 19 | 7 | -14 | 15 | 11 | 32 |
| 178 | 25 | -30 | 8 | - 5 | -22 | -28 | 22 | 57 | 0 | 30 |
| 179 | 13 | 2 | 68 | -24 | -11 | - 3 | - 7 | 26 | 8 | 42 |
| 180 | 32 | -39 | 21 | -16 | -19 | -35 | 21 | 52 | 12 | 38 |
| 181 | 20 | -41 | 12 | -18 | - 6 | -26 | 8 | 55 | 23 | 17 |
| 182 | 51 | -30 | 45 | -13 | 13 | -33 | 34 | 63 | 41 | 19 |

### Table E2 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 183 | 5 | -34 | -22 | - 5 | 13 | -43 | 37 | 40 | - 2 | 5 |
| 184 | 34 | -62 | 21 | -27 | - 6 | -37 | 34 | 72 | 37 | 32 |
| 185 | -51 | 24 | -21 | 49 | - 8 | 43 | -23 | -24 | -38 | 24 |
| 186 | 36 | - 7 | 21 | -18 | -14 | -23 | 37 | 28 | 14 | 7 |
| 187 | 8 | -26 | 7 | - 9 | 9 | - 6 | 8 | 52 | -15 | 15 |
| 188 | 6 | -11 | -21 | -15 | 0 | -66 | 17 | 18 | 4 | -24 |
| 189 | 37 | -53 | 8 | -20 | -22 | -35 | 41 | 60 | 25 | 30 |
| 190 | 22 | -14 | 35 | 6 | - 3 | 7 | - 4 | 33 | 13 | 30 |
| 191 | -14 | 0 | 24 | -14 | 24 | 13 | -16 | 30 | - 5 | - 0 |
| 192 | 7 | - 4 | -19 | 9 | 16 | -21 | 16 | 13 | 8 | -28 |
| 193 | 24 | -14 | 6 | 5 | - 8 | -37 | 22 | 44 | 6 | 11 |
| 194 | -18 | 16 | 10 | 30 | -12 | 23 | -26 | - 1 | -61 | 34 |
| 195 | 61 | -36 | 26 | 7 | -19 | -30 | 29 | 51 | 24 | 34 |
| 196 | 12 | 27 | 71 | 32 | 19 | 26 | -32 | - 4 | - 8 | 46 |
| 197 | 16 | -27 | 13 | - 2 | - 9 | 5 | 14 | 28 | - 0 | 58 |
| 198 | 57 | -34 | 48 | - 4 | -12 | -40 | 13 | 40 | 35 | 40 |
| 199 | 46 | - 6 | 61 | 25 | 30 | - 6 | 10 | 40 | 6 | 37 |
| 200 | 25 | -20 | 43 | -21 | -15 | 15 | 13 | 18 | 4 | 17 |
| 201 | -21 | 17 | -23 | -11 | 10 | - 1 | -16 | -42 | 8 | -10 |
| 202 | 30 | 19 | 68 | 15 | 1 | 12 | -19 | 5 | 3 | 33 |
| 203 | -35 | 28 | -15 | 44 | 8 | 19 | 0 | -24 | -27 | 25 |
| 204 | -31 | 67 | 38 | 28 | 23 | 35 | -56 | -16 | -21 | 10 |
| 205 | 62 | -32 | 70 | -10 | 14 | -14 | - 1 | 43 | 27 | 31 |
| 206 | 37 | -18 | 72 | - 2 | 27 | - 2 | 10 | 44 | 10 | 30 |
| 207 | 19 | - 8 | 41 | 8 | 14 | - 6 | - 2 | 34 | 20 | 42 |
| 208 | - 1 | 58 | 50 | 21 | 15 | 18 | -36 | -19 | - 1 | 24 |
| 209 | 20 | 44 | 61 | 27 | 15 | 9 | -19 | - 0 | - 2 | 20 |
| 210 | -46 | 61 | 16 | - 7 | 16 | 40 | -46 | -24 | -25 | - 3 |
| 211 | 22 | -46 | 24 | -45 | 17 | -16 | 25 | 32 | 24 | - 7 |
| 212 | - 4 | -15 | 37 | 5 | 9 | 11 | 18 | 40 | - 7 | 43 |
| 213 | 40 | -31 | 62 | -17 | - 2 | -19 | 10 | 55 | 34 | 39 |
| 214 | 50 | -55 | 60 | -27 | 32 | -34 | 25 | 50 | 50 | 22 |
| 215 | -57 | 67 | - 7 | 21 | - 0 | 54 | 56 | -43 | -54 | 1 |
| 216 | 43 | -48 | 52 | -33 | 28 | -33 | 25 | 27 | 55 | 21 |
| 217 | 5 | - 5 | - 4 | 1 | 3 | - 9 | 26 | 9 | 28 | 1 |
| 218 | 20 | -53 | 31 | -27 | 29 | -33 | - 3 | 18 | 35 | 23 |
| 219 | -55 | 32 | 17 | -11 | 7 | 28 | -31 | -24 | - 5 | 25 |
| 220 | 39 | -52 | 27 | -33 | 23 | -57 | 27 | 66 | 35 | 2 |
| 221 | 41 | 10 | 75 | 7 | 23 | 8 | - 7 | 17 | 15 | 30 |
| 222 | - 3 | 55 | 32 | 30 | 8 | 11 | -20 | 9 | - 8 | 20 |
| 223 | 27 | 6 | 80 | -12 | 36 | - 9 | -36 | 25 | 12 | 30 |
| 224 | 56 | -34 | 67 | 1 | 26 | -10 | 11 | 52 | 7 | 38 |
| 225 | 69 | -43 | 68 | -21 | 15 | -39 | 18 | 54 | 44 | 22 |
| 226 | 20 | 28 | 39 | 26 | -15 | - 9 | -13 | 24 | 11 | 22 |
| 227 | 0 | 52 | 51 | 11 | 6 | 13 | -40 | - 4 | 1 | 20 |
| 228 | -32 | 21 | 30 | -21 | 22 | - 6 | -40 | 7 | - 7 | 7 |
| 229 | 14 | -21 | 58 | -20 | 28 | -16 | - 9 | 29 | 15 | 32 |

Table E2 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 230 | 5 | 48 | 59 | 33 | 8 | 21 | -30 | 4 | 7 | 34 |
| 231 | 8 | -36 | 6 | -20 | - 2 | -23 | 30 | 54 | -15 | 15 |
| 232 | 12 | -55 | 20 | -36 | 7 | -40 | 34 | 51 | 32 | 24 |
| 233 | 51 | -56 | 7 | - 6 | 2 | -63 | 53 | 59 | 35 | 5 |
| 234 | 27 | -46 | 7 | -24 | 9 | -46 | 37 | 50 | 26 | 5 |
| 235 | 53 | -60 | 55 | -18 | 11 | -31 | 30 | 66 | 48 | 42 |
| 236 | 10 | -34 | 9 | -40 | 8 | -19 | 26 | 53 | - 2 | - 0 |
| 237 | -12 | -35 | 14 | -54 | 19 | - 7 | 22 | 30 | 12 | 4 |
| 238 | 37 | -41 | 31 | -18 | 12 | -29 | 28 | 67 | 15 | 23 |
| 239 | 53 | -72 | 1 | -29 | - 2 | -59 | 51 | 58 | 48 | 3 |
| 240 | 42 | -35 | 17 | 15 | 9 | -15 | 43 | 52 | 24 | 17 |
| 241 | -46 | 59 | 10 | 7 | 15 | 11 | -39 | - 8 | -29 | - 1 |
| 242 | 2 | 0 | 17 | 4 | - 1 | -16 | 8 | 51 | -22 | 13 |
| 243 | 47 | -62 | 22 | -26 | 18 | -17 | 29 | 23 | 17 | 11 |
| 244 | 13 | - 4 | 43 | - 7 | 12 | 19 | -12 | -10 | - 3 | 36 |
| 245 | -13 | -17 | 40 | -30 | 41 | 13 | 1 | 19 | 13 | 27 |
| 246 | 65 | -62 | 37 | - 4 | - 9 | -36 | 32 | 56 | 27 | 29 |
| 247 | 25 | - 8 | 29 | 13 | - 2 | -34 | 18 | 45 | 19 | 24 |
| 248 | -15 | 53 | 6 | 15 | 36 | - 1 | - 6 | - 5 | - 6 | 3 |
| 249 | -68 | 50 | -36 | -13 | - 0 | 37 | -30 | -36 | -31 | -27 |
| 250 | - 9 | 33 | -19 | 11 | -13 | 1 | - 6 | -17 | -17 | -21 |
| 251 | -19 | 1 | -40 | 28 | - 1 | - 4 | 18 | 12 | - 6 | -14 |
| 252 | 24 | -14 | 14 | 11 | - 8 | -17 | 12 | 47 | - 4 | 9 |
| 253 | -13 | 35 | 14 | 20 | 19 | 4 | -14 | 11 | 1 | 19 |
| 254 | 17 | - 6 | 64 | 5 | 18 | -17 | - 8 | 29 | 7 | 43 |
| 255 | 6 | 3 | 18 | 25 | 2 | -12 | 9 | 42 | -14 | 35 |
| 256 | 1 | 5 | 34 | 9 | 15 | -12 | - 5 | 52 | - 2 | 13 |
| 257 | 43 | -50 | 43 | 16 | 1 | -14 | 20 | 46 | 11 | 57 |
| 258 | 30 | -24 | 61 | - 3 | 20 | -22 | - 8 | 43 | 27 | 38 |
| 259 | -26 | 15 | 20 | 1 | 35 | - 3 | -13 | 6 | -15 | 24 |
| 260 | 17 | 18 | 39 | 32 | 44 | 22 | -14 | 7 | -30 | 29 |
| 261 | 69 | -55 | 57 | -12 | 24 | -25 | 22 | 50 | 47 | 27 |
| 262 | 35 | -32 | 42 | 27 | 4 | - 5 | 18 | 55 | 16 | 60 |
| 263 | 26 | -45 | 54 | -50 | 27 | -17 | 18 | 34 | 39 | 28 |
| 264 | - 8 | - 8 | 29 | -22 | 27 | 15 | - 0 | 12 | 5 | 12 |
| 265 | -52 | 46 | 7 | 19 | 14 | 25 | -51 | -26 | -33 | 11 |
| 266 | -61 | 76 | - 2 | 25 | - 5 | 48 | -32 | -35 | -42 | - 7 |
| 267 | 44 | -26 | 64 | -12 | 21 | - 5 | - 6 | 42 | 19 | 46 |
| 268 | 35 | -20 | 59 | -16 | 44 | 2 | 1 | 38 | 12 | 25 |
| 269 | -34 | 22 | -28 | 17 | -25 | 20 | - 9 | -20 | -36 | 16 |
| 270 | 78 | -60 | 56 | -13 | 28 | -35 | 19 | 51 | 52 | 24 |
| 271 | 52 | -17 | 31 | 22 | -11 | -26 | 28 | 46 | 23 | 40 |
| 272 | 32 | -25 | 68 | - 7 | 28 | -17 | 9 | 65 | 25 | 30 |
| 273 | - 8 | 3 | 9 | 6 | 22 | 1 | 6 | 15 | 0 | 5 |
| 274 | 39 | - 2 | 66 | 11 | 52 | - 7 | - 2 | 37 | 7 | 28 |
| 275 | 38 | 2 | 32 | 18 | 6 | -27 | - 3 | 43 | 16 | 16 |
| 276 | 73 | -36 | 41 | 12 | -17 | -36 | 29 | 41 | 37 | 32 |

### Table E2 Continued

| | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 277 | 46 | 16 | 46 | 31 | 12 | -15 | -19 | 25 | 21 | 24 |
| 278 | - 1 | -10 | 38 | -45 | - 4 | - 3 | 6 | 19 | - 6 | 23 |
| 279 | -53 | 34 | -27 | 29 | -15 | 18 | -10 | -21 | -30 | 9 |
| 280 | 45 | -14 | 36 | 4 | -26 | -13 | 15 | 13 | 34 | 17 |
| 281 | 5 | -58 | - 2 | -26 | 6 | -24 | 33 | 57 | 16 | 15 |
| 282 | 9 | -42 | 28 | -51 | 15 | -11 | 5 | 49 | 25 | 10 |
| 283 | 12 | -17 | 3 | -13 | -23 | -33 | 25 | 36 | - 5 | 12 |
| 284 | -27 | 42 | 4 | 22 | -18 | 25 | -32 | -38 | -51 | 8 |
| 285 | 25 | -30 | 38 | 9 | 8 | -26 | 14 | 59 | 2 | 42 |
| 286 | - 4 | -22 | -27 | -10 | -10 | -45 | 40 | 35 | 5 | - 6 |
| 287 | 59 | -37 | 10 | - 6 | 18 | -22 | 58 | 29 | 26 | 16 |
| 288 | -34 | 46 | - 0 | 19 | 15 | 21 | -26 | -33 | -29 | - 1 |
| 289 | -44 | 67 | 8 | 30 | - 2 | 51 | -58 | -46 | -37 | 4 |
| 290 | -20 | 27 | 0 | 28 | -18 | 28 | -15 | -36 | -15 | 44 |
| 291 | -13 | -17 | 45 | -41 | 12 | - 3 | -11 | 36 | - 5 | 17 |
| 292 | -43 | 22 | 1 | - 2 | - 1 | 26 | -22 | -15 | -31 | 22 |
| 293 | -54 | 46 | - 4 | - 3 | - 1 | 12 | -42 | -15 | -29 | 19 |
| 294 | - 2 | -25 | -28 | -19 | 7 | -37 | 22 | 31 | 5 | -13 |
| 295 | 66 | -47 | 42 | 20 | 4 | -17 | 16 | 39 | 32 | 36 |
| 296 | - 3 | -23 | 48 | -32 | 16 | 9 | - 6 | 37 | 17 | 28 |
| 297 | -31 | 44 | 1 | 18 | - 7 | 27 | -46 | -25 | -16 | 3 |
| 298 | -44 | 27 | -15 | - 6 | - 5 | 13 | -23 | - 7 | -25 | 17 |
| 299 | 37 | -63 | 13 | -29 | 4 | - 6 | 48 | 17 | 37 | 27 |
| 300 | - 6 | 54 | 4 | 41 | - 7 | 4 | -14 | -10 | 9 | 5 |

### Table E3

### Correlation of all JCES Item Percents and Factor Scores from Principal-Component-Varimax Analysis of Items 3, 6, 9, ---, 300

| | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | -14 | 6 | 22 | -33 | 10 | 27 | 30 | 40 | 11 | - 3 |
| 2 | -20 | -14 | - 8 | 29 | 32 | -24 | -22 | 4 | 18 | 3 |
| 3 | -66 | -23 | - 7 | 18 | - 9 | 17 | 22 | 23 | 30 | 32 |
| 4 | 13 | 16 | 45 | 10 | -23 | -17 | - 4 | -42 | - 3 | 9 |
| 5 | -34 | -11 | - 8 | 14 | 11 | 3 | 3 | 23 | 26 | 8 |
| 6 | -18 | -16 | 31 | -42 | 2 | 24 | 47 | 41 | 20 | 7 |
| 7 | -38 | - 9 | 2 | 5 | - 9 | 2 | 1 | 3 | 21 | 22 |
| 8 | 33 | 26 | 60 | -12 | -24 | -12 | 8 | -43 | - 9 | - 6 |
| 9 | -42 | - 0 | 15 | - 3 | -23 | 7 | 14 | 63 | 26 | 13 |
| 10 | 13 | 2 | 35 | - 8 | -19 | 15 | 10 | 1 | 22 | 14 |
| 11 | -50 | -18 | 2 | 26 | -12 | 9 | 39 | 33 | 33 | 31 |
| 12 | -19 | 4 | 1 | 3 | 4 | 35 | 5 | 12 | 39 | 21 |
| 13 | -22 | -11 | -10 | 28 | 20 | - 2 | 9 | 13 | 23 | - 3 |
| 14 | -29 | -28 | -19 | 14 | 26 | - 1 | 3 | 53 | 9 | - 8 |
| 15 | -55 | -33 | 15 | 30 | -25 | 19 | 30 | 44 | 67 | 47 |
| 16 | -14 | -25 | 38 | -11 | -27 | 5 | 33 | 40 | 35 | 33 |
| 17 | -62 | -41 | -24 | 30 | 1 | 6 | -12 | 62 | 38 | 21 |
| 18 | -55 | -43 | 13 | 23 | -21 | 9 | 4 | 64 | 39 | 23 |
| 19 | -34 | -35 | 21 | 2 | -29 | 2 | 30 | 44 | 13 | 30 |
| 20 | -30 | -14 | 34 | 22 | -27 | - 6 | 27 | 4 | 38 | 46 |
| 21 | 16 | 24 | 64 | -18 | -20 | - 7 | - 3 | -11 | 5 | 28 |
| 22 | 30 | 22 | -24 | 8 | 1 | -14 | -27 | -64 | -25 | -13 |
| 23 | -28 | -26 | 19 | -14 | -19 | 8 | 11 | 65 | 21 | 23 |
| 24 | -30 | -36 | 63 | 1 | -20 | 3 | 29 | 44 | 27 | 32 |
| 25 | -55 | -22 | 13 | 24 | - 5 | 6 | 29 | 36 | 45 | 36 |
| 26 | 24 | - 3 | 66 | -31 | -29 | - 2 | 19 | 2 | 12 | 2 |
| 27 | -31 | -47 | 45 | - 2 | -21 | -14 | 17 | 60 | 27 | 23 |
| 28 | -12 | 0 | 3 | 3 | -15 | - 4 | 13 | 20 | 26 | - 2 |
| 29 | -35 | -16 | - 2 | - 8 | -12 | 30 | 9 | 65 | 30 | 12 |
| 30 | 5 | 7 | -46 | 15 | - 2 | 6 | - 5 | -45 | -22 | - 8 |
| 31 | -39 | 1 | -26 | 41 | 15 | 3 | - 7 | 2 | 0 | 9 |
| 32 | -61 | -15 | - 1 | 41 | -26 | 1 | 22 | 28 | 15 | 16 |
| 33 | -37 | 6 | -28 | 10 | 19 | 13 | -14 | 48 | 34 | - 4 |
| 34 | -31 | -15 | 35 | 19 | -36 | - 6 | 10 | 13 | 18 | 23 |
| 35 | -41 | -14 | -12 | 17 | -13 | 9 | - 2 | 70 | 26 | 20 |
| 36 | -23 | -12 | 20 | 38 | -21 | -13 | 0 | 13 | 62 | 26 |
| 37 | -11 | 5 | - 2 | -15 | 21 | 23 | - 1 | 25 | 8 | 13 |
| 38 | -55 | -13 | 12 | 32 | -28 | 3 | 7 | 30 | 36 | 27 |
| 39 | -73 | -36 | -11 | 56 | -28 | - 9 | 19 | 45 | 28 | 19 |
| 40 | -14 | - 9 | -34 | 49 | -13 | -25 | -39 | 11 | 13 | - 5 |
| 41 | -39 | -31 | 43 | 12 | -29 | 8 | 22 | 33 | 18 | 35 |
| 42 | -17 | -23 | 27 | -18 | 19 | 44 | 33 | 27 | 23 | 31 |

Table E3 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 43 | 40 | 23 | 37 | - 9 | 12 | -13 | - 6 | -31 | -11 | -33 |
| 44 | 7 | -11 | 61 | -35 | - 7 | 7 | 20 | 19 | 23 | - 0 |
| 45 | -64 | -36 | - 5 | 0 | 4 | 37 | 26 | 80 | 36 | 27 |
| 46 | -16 | -15 | - 2 | - 9 | -15 | 22 | 11 | 21 | 9 | 23 |
| 47 | -13 | -12 | 68 | -25 | -35 | 1 | 14 | 30 | 20 | 36 |
| 48 | - 6 | -20 | 77 | -12 | -13 | - 1 | 19 | 9 | 19 | 26 |
| 49 | 13 | 37 | 29 | - 7 | -14 | -25 | -14 | -36 | - 6 | - 7 |
| 50 | -33 | -37 | 12 | 6 | - 3 | 13 | 23 | 64 | 28 | 38 |
| 51 | -27 | -15 | - 6 | 41 | -22 | - 9 | -33 | 35 | 33 | 19 |
| 52 | 11 | - 2 | 33 | -23 | - 2 | 6 | 23 | - 1 | 13 | 4 |
| 53 | -21 | - 6 | 32 | -12 | -23 | - 5 | 28 | - 9 | 0 | 24 |
| 54 | -36 | -19 | 36 | 20 | -33 | - 2 | 31 | 34 | 14 | 31 |
| 55 | -31 | -29 | 10 | 13 | -23 | 1 | 13 | 20 | 31 | 16 |
| 56 | 23 | 14 | 39 | -20 | -10 | - 0 | 13 | -11 | 7 | 11 |
| 57 | - 6 | 31 | 14 | -24 | 16 | 71 | 38 | 4 | 22 | 28 |
| 58 | - 9 | - 9 | 33 | -19 | -26 | - 4 | 26 | 9 | 14 | 4 |
| 59 | -35 | -29 | 13 | 20 | -27 | - 6 | 3 | 41 | 23 | 39 |
| 60 | -32 | -39 | 63 | - 9 | -37 | 5 | 29 | 33 | 28 | 28 |
| 61 | -19 | -49 | 22 | 7 | -18 | - 1 | 23 | 31 | 23 | 19 |
| 62 | -17 | -48 | 43 | 40 | -40 | -36 | - 3 | 11 | 29 | 27 |
| 63 | -42 | - 0 | 8 | - 4 | -10 | 38 | 30 | 43 | 48 | 34 |
| 64 | -47 | -48 | 11 | 37 | - 0 | -21 | 13 | 43 | 30 | 9 |
| 65 | -33 | -14 | 4 | 18 | - 8 | 3 | 13 | 33 | 31 | 18 |
| 66 | -28 | -32 | -18 | 29 | -12 | -10 | -29 | 10 | 13 | 8 |
| 67 | -37 | -20 | - 7 | 31 | -11 | 14 | 11 | 23 | 37 | 12 |
| 68 | 1 | 3 | 7 | 8 | 23 | -20 | 18 | - 1 | - 2 | -26 |
| 69 | -13 | - 6 | 22 | 41 | - 6 | -28 | -40 | 3 | 13 | 28 |
| 70 | -38 | -39 | 22 | 9 | - 8 | 12 | 20 | 39 | 27 | 23 |
| 71 | -17 | - 1 | 41 | -26 | - 3 | 27 | 12 | 54 | 23 | 35 |
| 72 | 2 | 33 | 63 | -10 | -17 | 1 | 31 | 1 | 20 | 34 |
| 73 | -41 | -30 | 39 | - 3 | 4 | 33 | 33 | 62 | 30 | 36 |
| 74 | -39 | -20 | 12 | 22 | -10 | 16 | 10 | 37 | 46 | 29 |
| 75 | -27 | 0 | -27 | 28 | - 6 | -17 | 8 | -17 | -16 | -33 |
| 76 | -29 | 4 | 40 | - 7 | - 2 | 32 | 13 | 45 | 37 | 48 |
| 77 | - 5 | - 9 | 67 | -12 | -22 | - 3 | 13 | 0 | 17 | 20 |
| 78 | -70 | -31 | 6 | 30 | - 9 | 15 | 19 | 36 | 32 | 35 |
| 79 | -13 | -13 | 56 | 5 | -14 | - 1 | 28 | 8 | 30 | 21 |
| 80 | -29 | -15 | 47 | -10 | -22 | 14 | 13 | 65 | 42 | 41 |
| 81 | -43 | -28 | - 4 | 41 | -18 | 22 | -16 | 42 | 13 | 23 |
| 82 | -42 | 3 | -27 | 41 | 19 | 1 | - 2 | - 2 | 0 | 6 |
| 83 | -33 | -15 | 17 | 15 | -36 | 9 | -16 | 30 | 19 | 10 |
| 84 | 39 | 15 | 29 | -40 | -14 | - 0 | 27 | -48 | - 8 | 2 |
| 85 | -17 | - 3 | 4 | 16 | 18 | - 9 | - 9 | 4 | 17 | 8 |
| 86 | -39 | -17 | -16 | 25 | -32 | 1 | 3 | 63 | 24 | 18 |
| 87 | -47 | -38 | - 7 | 43 | -30 | 4 | 11 | 36 | 46 | 32 |
| 88 | -12 | -15 | - 6 | 25 | -11 | -22 | - 3 | - 6 | - 7 | -12 |
| 89 | -31 | -20 | -18 | 53 | - 4 | - 8 | -19 | 7 | 30 | - 4 |

Table E5 Continued

| Item | Factor<br>1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 90 | -14 | - 2 | -29 | 15 | -33 | -27 | -20 | - 3 | -13 | 0 |
| 91 | 6 | 1 | 67 | -17 | -20 | 19 | 36 | 10 | 25 | 48 |
| 92 | -45 | -28 | 22 | 13 | -14 | 28 | 14 | 78 | 48 | 41 |
| 93 | 7 | -20 | 62 | -15 | -13 | 18 | 38 | 22 | 21 | 21 |
| 94 | -16 | -27 | 56 | -26 | - 6 | 29 | 36 | 53 | 39 | 26 |
| 95 | 27 | 7 | 65 | -23 | - 6 | -12 | 26 | -36 | 5 | 1 |
| 96 | -18 | -36 | 64 | - 9 | -14 | - 1 | 55 | 37 | 36 | 44 |
| 97 | -21 | -43 | 40 | - 8 | - 0 | 23 | 35 | 50 | 28 | 35 |
| 98 | -30 | -11 | -25 | -29 | 21 | 41 | 21 | 46 | 5 | 14 |
| 99 | 30 | 11 | 49 | 3 | - 8 | - 1 | 12 | -46 | 1 | - 2 |
| 100 | 2 | 59 | -27 | 8 | 1 | 4 | -22 | -31 | -12 | -21 |
| 101 | -36 | - 5 | - 3 | - 4 | 14 | 19 | 18 | 61 | 15 | 20 |
| 102 | -33 | -20 | 32 | -20 | -27 | 19 | 22 | 65 | 34 | 43 |
| 103 | -13 | - 8 | 32 | -12 | -20 | 7 | 35 | 22 | 12 | 37 |
| 104 | -18 | -16 | 24 | -13 | -13 | 17 | 34 | 44 | 30 | 31 |
| 105 | -19 | -13 | 49 | - 3 | -32 | -11 | 13 | 28 | 39 | 53 |
| 106 | 0 | -13 | 18 | 4 | -35 | 12 | - 3 | 20 | 20 | 31 |
| 107 | -36 | -30 | 43 | - 3 | -29 | 21 | 22 | 67 | 30 | 37 |
| 108 | 40 | - 3 | 46 | - 9 | 28 | -20 | - 8 | -30 | 10 | 2 |
| 109 | - 8 | - 5 | 16 | -10 | 2 | 1 | 37 | - 6 | -13 | 12 |
| 110 | -42 | -13 | 21 | 7 | -39 | 18 | 29 | 42 | 26 | 54 |
| 111 | -19 | - 1 | 16 | 1 | -48 | 13 | 11 | - 9 | 27 | 20 |
| 112 | -23 | - 0 | 11 | 9 | - 2 | - 1 | 24 | 42 | 27 | 31 |
| 113 | -33 | -29 | - 6 | 33 | 7 | 28 | 8 | 53 | 41 | 52 |
| 114 | -28 | -12 | - 7 | 14 | 27 | 0 | 28 | 48 | - 1 | 6 |
| 115 | -44 | - 4 | -20 | 15 | 5 | 32 | 1 | 65 | 25 | 42 |
| 116 | 6 | -31 | 32 | 23 | - 3 | -28 | - 4 | 27 | 2 | 23 |
| 117 | -36 | -21 | - 3 | -19 | - 0 | 40 | 3 | 69 | 21 | 16 |
| 118 | -44 | -37 | - 1 | 43 | -10 | 15 | -14 | 51 | 36 | - 1 |
| 119 | -67 | -39 | 2 | 41 | -17 | 2 | 16 | 49 | 34 | 31 |
| 120 | 34 | 33 | 57 | - 8 | -29 | -13 | 14 | -53 | - 6 | 4 |
| 121 | -44 | -24 | 40 | - 0 | -41 | 32 | 34 | 61 | 32 | 50 |
| 122 | -11 | 18 | 20 | - 8 | - 5 | 29 | 24 | 34 | 26 | 31 |
| 123 | -45 | -35 | 14 | 29 | -39 | 25 | 33 | 64 | 32 | 51 |
| 124 | - 4 | -33 | 28 | 14 | -15 | - 4 | 17 | 17 | 27 | 3 |
| 125 | - 8 | -40 | 22 | 25 | - 3 | 4 | - 5 | 20 | 27 | 9 |
| 126 | -46 | - 3 | - 2 | 21 | -12 | - 1 | 14 | 13 | 6 | 41 |
| 127 | 5 | -23 | -13 | 17 | 8 | -23 | -13 | -15 | - 3 | - 8 |
| 128 | -55 | -13 | - 6 | 46 | -11 | 11 | 17 | 40 | 46 | 40 |
| 129 | -19 | -10 | 46 | - 6 | -24 | -27 | 49 | 16 | - 2 | 20 |
| 130 | -32 | -11 | 48 | -19 | -32 | 22 | 46 | 53 | 29 | 36 |
| 131 | -39 | -12 | - 9 | 25 | 8 | 12 | -10 | 22 | 16 | 11 |
| 132 | -10 | 17 | -15 | 29 | 20 | 46 | - 2 | - 8 | 15 | - 9 |
| 133 | -76 | -37 | - 2 | 43 | -26 | 13 | 18 | 56 | 31 | 36 |
| 134 | -33 | -36 | 4 | 24 | -24 | - 3 | -13 | 22 | 18 | 12 |
| 135 | 69 | 36 | 16 | -49 | 27 | 1 | -14 | -48 | -25 | -38 |

Table E3 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 136 | -55 | -29 | - 1 | 15 | - 5 | 23 | 17 | 75 | 21 | 33 |
| 137 | -68 | -44 | - 3 | 45 | -21 | 19 | 19 | 60 | 40 | 31 |
| 138 | -33 | -18 | -19 | 76 | - 7 | - 4 | - 6 | 11 | 14 | 9 |
| 139 | -15 | 2 | 35 | 19 | -12 | - 9 | 7 | 22 | 10 | - 3 |
| 140 | -48 | -28 | -15 | 55 | - 9 | - 7 | - 1 | 20 | 21 | 8 |
| 141 | -40 | - 0 | -30 | -16 | 15 | 50 | 16 | 52 | 15 | 5 |
| 142 | -23 | 28 | -10 | -17 | 22 | 44 | 42 | 8 | - 3 | 4 |
| 143 | -11 | -16 | 66 | -26 | -44 | 14 | 36 | 38 | 31 | 50 |
| 144 | - 5 | 10 | 26 | - 2 | -23 | 9 | 53 | 1 | 21 | 32 |
| 145 | -46 | -25 | -11 | 6 | 3 | 23 | 14 | 57 | 18 | 18 |
| 146 | -22 | 7 | 1 | -30 | 9 | 19 | 39 | 1 | -12 | 4 |
| 147 | -48 | -28 | 27 | 18 | -19 | 14 | 35 | 74 | 31 | 47 |
| 148 | -43 | -17 | -19 | 16 | 5 | 20 | 4 | 46 | 35 | 40 |
| 149 | -12 | 14 | 2 | -38 | - 5 | 30 | 7 | 39 | 30 | 21 |
| 150 | -31 | -33 | 28 | 6 | -30 | 7 | 2 | 19 | 9 | 16 |
| 151 | 5 | 2 | 46 | -26 | -31 | 15 | 48 | 2 | 15 | 27 |
| 152 | - 2 | -20 | 56 | -15 | -16 | - 8 | 37 | 9 | 14 | 14 |
| 153 | -46 | 0 | 11 | 16 | - 2 | 36 | 11 | 33 | 43 | 63 |
| 154 | 27 | - 1 | 34 | 1 | -18 | -28 | 15 | -45 | -11 | -23 |
| 155 | -43 | - 4 | - 7 | 19 | -19 | 36 | 22 | 13 | 15 | 29 |
| 156 | 6 | 22 | 27 | 5 | - 7 | 38 | -11 | - 2 | 18 | 17 |
| 157 | -38 | -29 | -14 | 58 | -13 | -17 | - 8 | 26 | 22 | - 4 |
| 158 | - 8 | -20 | 12 | -15 | - 3 | -22 | 21 | - 8 | - 8 | - 7 |
| 159 | -27 | -49 | 8 | 17 | -19 | 4 | 11 | 29 | 25 | 54 |
| 160 | -50 | - 8 | -29 | 25 | - 5 | 29 | - 2 | 70 | 28 | 29 |
| 161 | -51 | -42 | - 2 | 25 | 9 | 10 | 6 | 77 | 21 | 38 |
| 162 | 10 | - 2 | - 0 | 54 | -11 | -32 | -14 | -25 | - 7 | - 6 |
| 163 | -22 | 3 | 25 | -17 | 1 | 35 | 45 | 20 | 19 | 28 |
| 164 | 9 | 9 | 13 | -24 | 2 | 11 | 4 | -17 | 11 | 8 |
| 165 | -56 | -10 | -14 | - 6 | 18 | 35 | 29 | 68 | 14 | 19 |
| 166 | -71 | -37 | -15 | 55 | - 8 | 4 | 11 | 58 | 33 | 26 |
| 167 | 1 | 34 | 12 | -21 | -28 | 19 | 39 | -29 | - 7 | 3 |
| 168 | -44 | -29 | 11 | 6 | 1 | 43 | 16 | 72 | 36 | 45 |
| 169 | 18 | 9 | 28 | -29 | - 4 | -15 | 34 | -28 | -37 | 3 |
| 170 | 21 | 22 | 9 | - 3 | -26 | 4 | - 8 | -54 | - 3 | -10 |
| 171 | 22 | - 2 | -12 | - 5 | 15 | -36 | 13 | -57 | -48 | -24 |
| 172 | 6 | 22 | 10 | 20 | -20 | -20 | - 9 | -33 | 5 | 9 |
| 173 | -24 | -17 | 42 | 22 | -29 | -10 | 13 | 24 | 42 | 24 |
| 174 | -21 | 1 | 1 | - 3 | 4 | 42 | - 5 | 59 | 45 | 20 |
| 175 | -55 | -13 | 6 | 5 | - 5 | 25 | 31 | 59 | 28 | 15 |
| 176 | 26 | 15 | 50 | -38 | -10 | 16 | 8 | 19 | 26 | 12 |
| 177 | - 9 | - 7 | 68 | 8 | -50 | 6 | 21 | 29 | 41 | 20 |
| 178 | -70 | -23 | -11 | 45 | -14 | 4 | 17 | 34 | 21 | 40 |
| 179 | -22 | -20 | 48 | 11 | -55 | 13 | 16 | 38 | 46 | 29 |
| 180 | -57 | -25 | - 4 | 44 | -30 | 14 | - 0 | 44 | 36 | 51 |
| 181 | -48 | -31 | - 1 | 46 | -17 | 0 | -15 | 30 | 30 | 37 |
| 182 | -55 | -12 | 10 | 27 | -20 | 11 | 22 | 60 | 36 | 26 |

Table E3 Continued

| | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 183 | -45 | -32 | -25 | 53 | 31 | 11 | 22 | 13 | 21 | 11 |
| 184 | -72 | -49 | - 9 | 68 | -29 | -15 | 6 | 49 | 34 | 37 |
| 185 | 20 | 6 | 5 | -14 | -14 | -15 | 29 | -40 | -29 | 2 |
| 186 | -32 | 13 | -10 | 12 | -23 | 50 | 1 | 39 | 44 | 0 |
| 187 | -50 | -35 | - 5 | 25 | -15 | - 4 | 8 | 23 | 24 | 11 |
| 188 | -15 | 7 | -21 | 30 | 36 | 24 | -12 | 5 | 25 | 14 |
| 189 | -63 | -34 | -26 | 61 | -16 | 38 | 11 | 45 | 27 | 13 |
| 190 | -31 | -13 | 18 | 12 | -31 | 10 | 30 | 36 | 11 | 26 |
| 191 | -19 | -23 | 29 | 22 | -28 | -25 | 2 | 7 | 18 | - 1 |
| 192 | -13 | 11 | -14 | 9 | 45 | - 2 | 1 | 0 | 3 | 9 |
| 193 | -42 | 5 | -11 | 28 | - 1 | 21 | 15 | 25 | 38 | 35 |
| 194 | -11 | -11 | 17 | -22 | - 7 | 15 | 26 | - 5 | 5 | 35 |
| 195 | -62 | -16 | -22 | 18 | - 6 | 51 | 20 | 64 | 36 | 44 |
| 196 | 1 | - 1 | 62 | -36 | -23 | 25 | 36 | 32 | 31 | 37 |
| 197 | -36 | -23 | - 6 | 25 | -22 | 19 | 30 | 27 | 14 | 20 |
| 198 | -41 | -16 | 5 | 13 | - 9 | 35 | 11 | 62 | 49 | 67 |
| 199 | -39 | -13 | 28 | -16 | - 5 | 29 | 58 | 60 | 40 | 28 |
| 200 | -16 | -37 | 12 | - 7 | -32 | 10 | - 4 | 39 | 27 | 10 |
| 201 | 60 | 21 | - 5 | - 7 | 5 | - 8 | -21 | -33 | - 1 | -12 |
| 202 | - 7 | 2 | 42 | -32 | -16 | 30 | 29 | 43 | 20 | 22 |
| 203 | 16 | 17 | 12 | - 7 | 7 | - 0 | 41 | -31 | -10 | 9 |
| 204 | 22 | 36 | 75 | -44 | -17 | - 2 | 21 | -18 | 5 | 9 |
| 205 | -43 | -41 | 28 | - 6 | - 9 | 18 | 11 | 74 | 31 | 32 |
| 206 | -47 | -40 | 43 | - 0 | -23 | - 2 | 27 | 61 | 29 | 29 |
| 207 | -33 | -15 | 39 | 22 | -24 | 9 | 50 | 38 | 12 | 33 |
| 208 | 20 | 40 | 58 | -41 | -19 | 24 | 26 | 7 | 22 | 15 |
| 209 | 3 | 30 | 53 | -43 | -15 | 22 | 30 | 27 | 28 | 20 |
| 210 | 32 | 19 | 55 | -26 | -33 | -12 | - 2 | -32 | - 8 | -25 |
| 211 | -21 | -58 | 1 | 32 | -22 | -35 | -15 | 36 | 15 | 1 |
| 212 | -38 | -37 | 33 | 18 | -35 | - 5 | 37 | 25 | 26 | 16 |
| 213 | -51 | -34 | 34 | 29 | -35 | 15 | 12 | 61 | 42 | 45 |
| 214 | -38 | -55 | 22 | 27 | -15 | -27 | 6 | 67 | 33 | 27 |
| 215 | 39 | 37 | 33 | -40 | -14 | 18 | 15 | -48 | -15 | -16 |
| 216 | -16 | -44 | 22 | 23 | - 6 | -29 | 3 | 55 | 27 | 30 |
| 217 | - 5 | 6 | - 9 | 15 | - 5 | - 1 | 5 | 4 | 9 | - 7 |
| 218 | - 7 | -51 | 13 | 34 | 3 | -21 | - 4 | 32 | 20 | 30 |
| 219 | 34 | 6 | 59 | 7 | -56 | -32 | 2 | -35 | 11 | 13 |
| 220 | -54 | -42 | 1 | 58 | 4 | - 9 | - 2 | 49 | 32 | 17 |
| 221 | -16 | - 6 | 46 | -26 | -24 | 22 | 33 | 55 | 30 | 25 |
| 222 | -13 | 47 | 48 | -23 | -17 | 25 | 36 | 4 | 26 | 22 |
| 223 | -20 | -25 | 65 | -10 | -15 | 14 | 18 | 48 | 46 | 40 |
| 224 | -56 | -46 | 25 | - 5 | - 5 | 24 | 32 | 73 | 40 | 34 |
| 225 | -54 | -40 | 19 | 20 | -11 | 11 | 9 | 84 | 41 | 29 |
| 226 | -36 | 34 | 36 | - 1 | -14 | 36 | 15 | 32 | 27 | 37 |
| 227 | 1 | 30 | 64 | -30 | -18 | 18 | 20 | 11 | 28 | 31 |
| 228 | 8 | -10 | 60 | 8 | -12 | -21 | - 7 | -13 | 29 | 30 |
| 229 | -20 | -42 | 48 | 14 | -17 | - 5 | 13 | 39 | 37 | 30 |

## Table E3 Continued

| | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 230 | - 5 | 30 | 60 | -34 | -30 | 15 | 34 | 20 | 28 | 30 |
| 231 | -64 | -47 | - 7 | 51 | - 7 | 15 | 13 | 25 | 40 | 16 |
| 232 | -42 | -52 | 4 | 71 | -30 | -30 | 3 | 31 | 28 | 33 |
| 233 | -56 | -31 | -27 | 46 | 18 | 6 | 9 | 50 | 17 | 11 |
| 234 | -49 | -41 | -11 | 54 | 8 | -10 | 5 | 34 | 20 | 24 |
| 235 | -62 | -54 | 14 | 49 | -26 | 3 | 23 | 73 | 36 | 38 |
| 236 | -40 | -38 | - 5 | 38 | -15 | - 5 | - 2 | 21 | 23 | -12 |
| 237 | -14 | -63 | 14 | 51 | -33 | -42 | -15 | 6 | 22 | - 6 |
| 238 | -65 | -44 | 6 | 45 | -17 | 22 | 20 | 50 | 45 | 21 |
| 239 | -57 | -46 | -34 | 64 | 9 | - 6 | -11 | 48 | 24 | 16 |
| 240 | -52 | -16 | -13 | 29 | - 1 | 12 | 32 | 46 | 8 | - 5 |
| 241 | 16 | 25 | 50 | -12 | -13 | 4 | 3 | -32 | 15 | 6 |
| 242 | -54 | -17 | 15 | 19 | -11 | 9 | 20 | 18 | 18 | 27 |
| 243 | -20 | -69 | -23 | 9 | 7 | -12 | - 1 | 48 | 3 | - 8 |
| 244 | 8 | -30 | 30 | -24 | -20 | 2 | 20 | 25 | 17 | 23 |
| 245 | - 4 | -49 | 42 | 23 | -34 | -30 | 14 | 13 | 26 | 18 |
| 246 | -57 | -49 | -19 | 22 | 1 | 19 | 7 | 71 | 29 | 33 |
| 247 | -51 | 4 | 17 | 24 | 1 | 20 | 24 | 35 | 35 | 37 |
| 248 | 7 | 45 | 29 | -14 | 2 | 22 | 27 | -14 | 30 | -10 |
| 249 | 44 | 33 | 16 | - 5 | -21 | -22 | -20 | -69 | -21 | -44 |
| 250 | 10 | 44 | - 6 | -15 | 13 | 9 | - 6 | -21 | -15 | 3 |
| 251 | - 5 | 21 | -26 | 15 | 19 | -13 | 15 | -21 | -14 | -12 |
| 252 | -63 | - 9 | - 3 | 15 | 10 | -14 | 15 | 32 | 6 | 16 |
| 253 | - 5 | 38 | 39 | - 7 | -15 | 5 | 37 | - 6 | 23 | 15 |
| 254 | -24 | -24 | 48 | 7 | -18 | 3 | 29 | 39 | 34 | 44 |
| 255 | -51 | 9 | 20 | 13 | - 8 | 21 | 44 | 20 | 32 | 42 |
| 256 | -49 | -13 | 38 | 19 | -19 | - 8 | 20 | 20 | 31 | 32 |
| 257 | -48 | -54 | 4 | 14 | - 7 | 21 | 42 | 60 | 29 | 46 |
| 258 | -36 | -33 | 45 | 28 | -24 | 2 | 21 | 53 | 33 | 36 |
| 259 | - 2 | -11 | 46 | 12 | - 7 | -10 | 30 | - 5 | 26 | 23 |
| 260 | -13 | - 8 | 30 | -39 | 4 | 22 | 36 | 23 | 21 | 22 |
| 261 | -46 | -48 | 6 | 18 | - 8 | - 8 | 18 | 79 | 15 | 25 |
| 262 | -61 | -32 | 13 | 19 | -20 | 14 | 36 | 54 | 36 | 48 |
| 263 | -25 | -60 | 28 | 36 | -39 | -22 | - 2 | 46 | 39 | 24 |
| 264 | 1 | -36 | 36 | 10 | -32 | -16 | 16 | 8 | 31 | - 8 |
| 265 | 30 | 14 | 49 | -21 | - 8 | - 9 | 2 | -39 | 1 | 21 |
| 266 | 35 | 45 | 45 | -34 | -23 | - 1 | 18 | -52 | -10 | -16 |
| 267 | -39 | -47 | 32 | 1 | -21 | 18 | 25 | 63 | 35 | 32 |
| 268 | -32 | -49 | 31 | 0 | -15 | 7 | 26 | 53 | 29 | 1 |
| 269 | 9 | 15 | - 8 | - 9 | -10 | 10 | - 3 | -33 | - 3 | 1 |
| 270 | -47 | -50 | 4 | 13 | 13 | 7 | 11 | 84 | 27 | 25 |
| 271 | -59 | 6 | - 5 | 13 | - 3 | 38 | 27 | 56 | 36 | 40 |
| 272 | -55 | -40 | 45 | 21 | -30 | - 6 | 32 | 58 | 52 | 45 |
| 273 | -13 | - 1 | 23 | 8 | 6 | -13 | 47 | 4 | 5 | 4 |
| 274 | -40 | -22 | 47 | -10 | 2 | 17 | 46 | 59 | 37 | 28 |
| 275 | -49 | 11 | 15 | 2 | 2 | 21 | 9 | 43 | 26 | 33 |

Table E3 Continued

| | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Item** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** |
| 276 | -54 | - 7 | -13 | 4 | - 4 | 36 | 17 | 75 | 28 | 42 |
| 277 | -29 | 23 | 29 | -23 | 11 | 35 | 23 | 46 | 32 | 37 |
| 278 | -15 | -32 | 29 | 17 | -38 | - 2 | - 2 | 21 | 23 | 14 |
| 279 | 27 | 27 | 7 | - 1 | -18 | -16 | 11 | -52 | 4 | 23 |
| 280 | -13 | 6 | 1 | - 2 | -18 | 24 | - 1 | 41 | 26 | 27 |
| 281 | -43 | -50 | -14 | 65 | -22 | -24 | - 7 | 18 | 19 | 12 |
| 282 | -34 | -56 | 14 | 50 | -42 | -37 | -29 | 27 | 28 | 7 |
| 283 | -44 | -10 | -10 | 35 | -15 | 20 | 4 | 20 | 27 | 25 |
| 284 | 24 | 10 | 18 | -36 | - 9 | 22 | 10 | -20 | - 8 | 19 |
| 285 | -70 | -40 | 19 | 32 | -17 | - 1 | 37 | 49 | 32 | 52 |
| 286 | -34 | - 3 | -20 | 53 | 12 | - 1 | 11 | - 1 | 16 | 21 |
| 287 | -31 | -11 | -33 | 9 | 8 | 20 | 8 | 46 | 19 | 4 |
| 288 | 36 | 28 | 26 | -37 | - 5 | 8 | 5 | -33 | 10 | - 6 |
| 289 | 49 | 43 | 40 | -57 | - 9 | 10 | 3 | -39 | -17 | - 9 |
| 290 | 28 | 16 | 11 | -23 | -13 | 18 | 23 | -18 | -16 | 7 |
| 291 | -26 | -56 | 50 | 30 | -38 | -18 | -11 | 19 | 29 | 16 |
| 292 | 17 | - 6 | 26 | - 5 | -27 | -13 | 15 | -26 | - 8 | 15 |
| 293 | 21 | 23 | 39 | 6 | -30 | 1 | - 1 | -39 | 12 | 20 |
| 294 | -36 | -15 | -26 | 49 | 18 | - 2 | - 9 | - 2 | 15 | - 8 |
| 295 | -44 | -36 | - 9 | 5 | 2 | 20 | 18 | 70 | 17 | 29 |
| 296 | -22 | -49 | 41 | 29 | -49 | -28 | - 7 | 22 | 36 | 21 |
| 297 | 20 | 34 | 41 | -19 | -19 | 1 | -13 | -28 | -10 | 6 |
| 298 | 6 | 19 | 20 | 12 | -24 | 2 | - 0 | -36 | 11 | 20 |
| 299 | -15 | -51 | -21 | 24 | -11 | -10 | - 0 | 36 | 12 | 6 |
| 300 | 9 | 74 | 23 | -23 | - 5 | 18 | 28 | -13 | 9 | 9 |

## Table E4

### Correlation Matrix by Rows Below Diagonal for JCES Item Percents 1, 4, 7, ---, 298

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | -21 | | | | | | | | | |
| 3 | 7 | 11 | | | | | | | | |
| 4 | 13 | 18 | -10 | | | | | | | |
| 5 | - 9 | - 1 | - 1 | - 1 | | | | | | |
| 6 | 35 | 4 | - 8 | 22 | - 6 | | | | | |
| 7 | 31 | - 9 | 13 | 14 | -10 | 41 | | | | |
| 8 | -51 | 12 | -21 | - 4 | - 9 | -29 | -34 | | | |
| 9 | 17 | 6 | 14 | - 2 | 18 | 21 | 20 | -19 | | |
| 10 | 26 | - 9 | - 8 | - 1 | 2 | 12 | 13 | -11 | 43 | |
| 11 | -28 | 4 | 31 | -25 | 9 | -33 | -19 | - 5 | 17 | - 3 |
| 12 | - 1 | 24 | 7 | - 2 | - 8 | 20 | 6 | -11 | 25 | 6 |
| | 18 | | | | | | | | | |
| 13 | 22 | -18 | - 3 | -13 | -14 | 1 | - 5 | -17 | 9 | 8 |
| | 5 | - 0 | | | | | | | | |
| 14 | -36 | -16 | - 0 | -23 | 10 | -26 | -26 | 19 | 8 | 8 |
| | 22 | 0 | 5 | | | | | | | |
| 15 | - 2 | 49 | -11 | 20 | 2 | 2 | -16 | 18 | - 9 | 4 |
| | -16 | 3 | - 5 | -20 | | | | | | |
| 16 | 12 | -12 | 7 | 7 | -18 | 4 | 11 | -14 | 13 | - 2 |
| | - 8 | 9 | 2 | - 4 | -24 | | | | | |
| 17 | - 2 | 46 | 6 | 3 | -17 | 1 | -19 | 12 | 12 | 3 |
| | 10 | 20 | 0 | 3 | 30 | -29 | | | | |
| 18 | 14 | 14 | - 5 | 18 | - 7 | 27 | 4 | -24 | - 2 | -15 |
| | -19 | 12 | 11 | -38 | 29 | 5 | 11 | | | |
| 19 | 6 | - 4 | 44 | - 2 | 13 | 1 | 9 | -15 | 26 | 9 |
| | 21 | 41 | - 4 | 2 | -18 | 7 | 1 | - 1 | | |
| 20 | 29 | 24 | 15 | 7 | - 6 | 35 | 28 | -29 | 16 | 23 |
| | -18 | 13 | -11 | -35 | 21 | - 0 | 5 | 28 | 15 | |
| 21 | 25 | -22 | -15 | 23 | - 2 | 53 | 54 | -23 | 12 | 17 |
| | -19 | 12 | 3 | -11 | -10 | 14 | -28 | 8 | 3 | 32 |
| 22 | 7 | -12 | 12 | -16 | 7 | 12 | 25 | -42 | 38 | 20 |
| | 19 | 11 | 10 | 24 | - 1 | 6 | - 7 | - 1 | 18 | 26 |
| | 29 | | | | | | | | | |
| 23 | 22 | - 2 | 47 | - 3 | 19 | 7 | 30 | -27 | 44 | 23 |
| | 19 | 6 | 5 | 4 | -20 | 17 | - 2 | -20 | 46 | 18 |
| | 8 | 29 | | | | | | | | |
| 24 | 36 | -20 | - 3 | 9 | 2 | 53 | 44 | -35 | 24 | 15 |
| | 5 | 28 | 11 | -12 | - 8 | 7 | - 9 | 5 | 20 | 24 |
| | 76 | 36 | 18 | | | | | | | |
| 25 | 41 | -18 | 5 | 14 | 1 | 47 | 41 | -52 | 29 | 6 |
| | - 9 | 8 | 8 | -35 | -19 | 21 | -37 | 25 | 13 | 38 |
| | 48 | 40 | 20 | 53 | | | | | | |

## Table E4 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 25 | 1 | - 1 | 20 | 7 | 42 | 18 | -28 | 28 | 8 |
| | - 4 | 13 | 11 | -14 | -13 | 6 | 7 | 24 | 11 | 14 |
| | 12 | 4 | 5 | 31 | 39 | | | | | |
| 27 | 16 | 26 | 6 | 27 | 0 | 25 | 11 | -21 | 33 | 7 |
| | - 6 | 29 | 2 | -19 | 28 | - 2 | 16 | 32 | 33 | 25 |
| | 7 | 27 | 16 | 19 | 30 | 22 | | | | |
| 28 | -27 | 9 | 31 | -27 | 18 | -36 | -21 | - 2 | 23 | - 3 |
| | 93 | 20 | 2 | 18 | -13 | -15 | 16 | -22 | 28 | -14 |
| | -23 | 21 | 23 | 5 | -12 | - 5 | - 1 | | | |
| 29 | 1 | 10 | 17 | - 6 | 11 | - 8 | 1 | 6 | 22 | - 7 |
| | 2 | 10 | 21 | 18 | 7 | - 6 | 18 | - 3 | 18 | - 9 |
| | -14 | 14 | 28 | - 4 | - 1 | 2 | 21 | 10 | | |
| 30 | - 0 | 6 | 4 | 0 | -15 | - 4 | 7 | 7 | 20 | 23 |
| | 11 | 19 | -14 | 12 | 4 | - 3 | 10 | -16 | 9 | 4 |
| | - 7 | 13 | 10 | -10 | - 9 | -14 | 4 | 14 | 9 | |
| 31 | 14 | 21 | - 5 | 42 | - 9 | 54 | 29 | -12 | 3 | - 3 |
| | -30 | 18 | -13 | -45 | 19 | 12 | -13 | 40 | 2 | 37 |
| | 25 | - 8 | -16 | 23 | 46 | 36 | 39 | -33 | -11 | - 4 |
| 32 | 56 | - 9 | -17 | 28 | - 1 | 60 | 34 | -42 | 15 | 15 |
| | -34 | 5 | 17 | -36 | 1 | 9 | -25 | 41 | - 2 | 44 |
| | 47 | 22 | 1 | 42 | 72 | 42 | 30 | -38 | - 5 | -11 |
| | 52 | | | | | | | | | |
| 33 | 31 | - 4 | -12 | 22 | 4 | 44 | 33 | -40 | 16 | 2 |
| | -23 | - 2 | 17 | -32 | -11 | 26 | -31 | 46 | - 5 | 36 |
| | 49 | 21 | 1 | 42 | 69 | 33 | 25 | -28 | 1 | -15 |
| | 46 | 67 | | | | | | | | |
| 34 | -13 | 16 | 17 | -11 | - 1 | -47 | -21 | 6 | -18 | 2 |
| | 28 | -12 | - 7 | 21 | 5 | -14 | 33 | -22 | - 4 | - 9 |
| | -44 | -13 | 18 | -32 | -45 | -15 | -19 | 28 | 5 | - 1 |
| | -27 | -51 | -46 | | | | | | | |
| 35 | 19 | -10 | 14 | 27 | -22 | 30 | 19 | -12 | 19 | 5 |
| | 2 | 17 | 0 | -14 | -12 | 23 | -12 | 22 | - 0 | 23 |
| | 25 | 3 | - 4 | 18 | 28 | 20 | 18 | - 5 | -18 | 17 |
| | 44 | 28 | 28 | -19 | | | | | | |
| 36 | 0 | 9 | 1 | 34 | -28 | 18 | 9 | - 8 | -13 | 7 |
| | -14 | - 4 | 2 | 5 | - 8 | 8 | - 4 | -12 | -14 | 5 |
| | 25 | 7 | -16 | 13 | 15 | 8 | 7 | -20 | -16 | - 1 |
| | 15 | 14 | 15 | -15 | 17 | | | | | |
| 37 | 12 | 8 | - 2 | 4 | -24 | 20 | 3 | - 8 | - 1 | - 2 |
| | 2 | 9 | 6 | -37 | 1 | 1 | 6 | 30 | - 4 | 10 |
| | 1 | - 6 | 8 | - 7 | 14 | - 0 | 14 | 2 | - 4 | 16 |
| | 13 | 10 | 14 | - 8 | 27 | 1 | | | | |
| 38 | 12 | - 8 | - 9 | 10 | 5 | 19 | 15 | -24 | 29 | 22 |
| | - 5 | 8 | 7 | 4 | - 7 | 20 | - 8 | - 8 | 5 | 8 |
| | 21 | 32 | - 0 | 27 | 10 | 21 | 15 | - 4 | 8 | 1 |
| | 14 | 21 | 12 | -17 | 4 | 18 | -10 | | | |

### Table E4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 11 | -38 | - 2 | - 8 | 3 | 10 | 16 | -27 | 23 | 15 |
| | 12 | 4 | 34 | 22 | -45 | 15 | -23 | -15 | 5 | -23 |
| | 19 | 9 | 7 | 34 | 21 | 43 | -14 | 6 | 3 | -17 |
| | - 1 | 18 | 21 | - 4 | 11 | 6 | -17 | 36 | | |
| 40 | - 1 | -13 | 10 | 14 | 30 | 0 | 14 | -41 | 9 | 7 |
| | 9 | 1 | - 2 | 28 | -13 | 3 | -22 | - 3 | 17 | - 5 |
| | 20 | 37 | 16 | 30 | 30 | 22 | 5 | 6 | 6 | 2 |
| | - 9 | 18 | 21 | - 2 | -18 | 18 | -35 | 17 | 27 | |
| 41 | 21 | - 2 | 0 | 15 | -10 | 45 | 34 | -45 | 17 | 2 |
| | -11 | 17 | 24 | -15 | -28 | 28 | -18 | 21 | 13 | 30 |
| | 35 | 21 | 14 | 36 | 54 | 40 | 17 | -17 | -14 | -15 |
| | 41 | 55 | 53 | -30 | 16 | 31 | 9 | 31 | 35 | 23 |
| 42 | - 3 | 0 | -12 | 5 | 20 | 35 | 16 | 7 | 10 | 10 |
| | -22 | 12 | -17 | 3 | 4 | - 2 | -19 | 11 | 20 | 25 |
| | 41 | 17 | 11 | 34 | 24 | 23 | 10 | -20 | - 3 | -17 |
| | 14 | 34 | 23 | -34 | - 8 | - 6 | -16 | 7 | 2 | 15 |
| | 15 | | | | | | | | | |
| 43 | -25 | - 6 | - 5 | -29 | 5 | - 5 | - 4 | 15 | 9 | 11 |
| | 3 | - 2 | - 4 | 16 | 14 | -16 | 2 | - 6 | 3 | 6 |
| | 8 | 21 | 1 | 2 | - 6 | -24 | 1 | 3 | 3 | 8 |
| | -15 | -13 | -14 | - 7 | -15 | - 8 | 3 | -10 | - 8 | -13 |
| | -19 | 15 | | | | | | | | |
| 44 | 48 | -12 | 7 | 22 | -14 | 51 | 50 | -36 | 24 | 18 |
| | -14 | 20 | 0 | -28 | -15 | 24 | - 5 | 17 | 19 | 41 |
| | 53 | 23 | 20 | 55 | 50 | 36 | 27 | -16 | - 3 | - 9 |
| | 40 | 52 | 38 | -25 | 42 | 28 | 5 | 36 | 17 | 9 |
| | 55 | 23 | -26 | | | | | | | |
| 45 | 8 | - 7 | 27 | -13 | 11 | 19 | 33 | -39 | 38 | 9 |
| | 25 | 24 | 10 | 9 | -38 | 13 | - 6 | -17 | 38 | 13 |
| | 27 | 41 | 54 | 41 | 33 | 16 | 5 | 30 | 15 | 17 |
| | - 7 | 8 | 10 | - 6 | 2 | 15 | 10 | 25 | 27 | 36 |
| | 46 | 5 | 3 | 33 | | | | | | |
| 46 | 28 | -33 | - 4 | - 9 | 4 | 28 | 33 | -43 | 19 | 1 |
| | 6 | 11 | 32 | 11 | -42 | 9 | -24 | - 3 | 7 | 2 |
| | 35 | 35 | 13 | 49 | 38 | 27 | - 3 | - 1 | 1 | - 5 |
| | 2 | 38 | 38 | -12 | 19 | 12 | - 1 | 36 | 58 | 32 |
| | 43 | 2 | 3 | 36 | 44 | | | | | |
| 47 | 19 | 18 | -17 | - 1 | - 6 | 20 | 9 | -24 | 20 | 22 |
| | 7 | 28 | 1 | 3 | 23 | - 9 | 24 | 17 | 6 | 8 |
| | 11 | 20 | 1 | 29 | 14 | 12 | 28 | 9 | 14 | 16 |
| | 16 | 20 | 7 | 3 | 0 | -10 | - 1 | 28 | 18 | 18 |
| | 18 | 8 | - 7 | 27 | 17 | 17 | | | | |
| 48 | 24 | - 6 | 5 | - 3 | 5 | - 9 | 1 | -16 | 12 | 9 |
| | 28 | - 6 | 19 | -27 | -13 | - 1 | - 3 | 13 | 7 | 6 |
| | - 9 | - 8 | 20 | 3 | 11 | 9 | 6 | 32 | 1 | - 0 |
| | 5 | 10 | 11 | 18 | 20 | -18 | 28 | - 9 | 22 | -15 |
| | 3 | -10 | -10 | 17 | 8 | 13 | 8 | | | |

## Table E4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 49 | 34 | -30 | 2 | - 9 | 6 | 21 | 14 | -34 | 15 | 11 |
| | 10 | 6 | - 0 | 3 | -44 | 16 | -27 | -11 | 18 | - 4 |
| | 22 | 20 | 26 | 31 | 36 | 24 | - 6 | 6 | -13 | - 1 |
| | -12 | 21 | 19 | -13 | 14 | 5 | 12 | 24 | 37 | 21 |
| | 28 | 15 | -14 | 32 | 45 | 47 | 13 | 8 | | |
| 50 | 10 | -24 | 35 | 8 | -9 | 4 | 21 | -17 | 25 | 16 |
| | 22 | -13 | 18 | 14 | -36 | 9 | -24 | -22 | 17 | - 3 |
| | 17 | 22 | 23 | 16 | 17 | 13 | - 4 | 20 | 5 | 3 |
| | - 2 | 7 | 7 | -10 | 22 | 23 | - 9 | 35 | 33 | 23 |
| | 16 | - 6 | - 9 | 20 | 37 | 31 | -11 | 12 | 33 | |
| 51 | 23 | 7 | 12 | 24 | -14 | 45 | 26 | 3 | 9 | - 3 |
| | -22 | 26 | -15 | -30 | 11 | 20 | - 5 | 25 | 18 | 28 |
| | 28 | - 3 | - 3 | 27 | 24 | 14 | 33 | -19 | -14 | -10 |
| | 52 | 31 | 10 | -24 | 41 | 12 | 14 | - 1 | -17 | -26 |
| | 25 | 20 | - 6 | 49 | - 5 | - 8 | - 2 | 8 | - 8 | - 1 |
| 52 | -14 | 33 | 5 | -12 | - 3 | 6 | - 7 | 23 | - 1 | 4 |
| | - 5 | 19 | -23 | -14 | 47 | -11 | 9 | 21 | 10 | 24 |
| | -10 | - 2 | - 9 | -16 | -13 | -25 | 34 | - 6 | 7 | 5 |
| | 13 | - 2 | -10 | - 9 | 0 | -16 | 8 | -22 | -49 | -20 |
| | -25 | 23 | 31 | - 9 | -28 | -37 | 7 | - 9 | -41 | -50 |
| | 28 | | | | | | | | | |
| 53 | -14 | - 0 | - 1 | -11 | 31 | - 5 | 6 | -16 | 23 | 20 |
| | 16 | 12 | - 6 | 31 | - 7 | - 9 | - 7 | -21 | 10 | - 4 |
| | 7 | 23 | 22 | 13 | - 2 | - 5 | - 3 | 17 | 11 | 9 |
| | -26 | - 9 | 3 | - 3 | -22 | - 4 | -11 | 17 | 22 | 46 |
| | 6 | 15 | 19 | -12 | 36 | 22 | 28 | -12 | 17 | 2 |
| | -38 | 4 | | | | | | | | |
| 54 | 14 | -47 | - 5 | - 8 | 12 | 2 | 13 | -32 | 21 | 16 |
| | 15 | 8 | 35 | 39 | -50 | 9 | -22 | -23 | - 0 | -23 |
| | 18 | 22 | 10 | 32 | 15 | 25 | -13 | 12 | - 2 | - 6 |
| | -17 | 9 | 11 | 3 | 15 | 12 | -21 | 32 | 70 | 38 |
| | 27 | -15 | -16 | 17 | 38 | 64 | 12 | 14 | 37 | 44 |
| | -21 | -56 | 29 | | | | | | | |
| 55 | 31 | - 4 | 16 | 19 | 7 | 23 | 7 | -21 | 6 | 9 |
| | 4 | - 0 | 19 | -41 | - 4 | 4 | -12 | 37 | 16 | 25 |
| | 15 | - 4 | 4 | 18 | 33 | 17 | 22 | - 4 | -15 | - 9 |
| | 37 | 35 | 37 | - 9 | 29 | 8 | 38 | 11 | 6 | 1 |
| | 32 | - 2 | -15 | 26 | 15 | 22 | 6 | 41 | 18 | 32 |
| | 28 | - 5 | -21 | 8 | | | | | | |
| 56 | - 7 | -19 | 17 | -27 | 31 | 9 | 18 | -31 | 45 | 7 |
| | 26 | 10 | 15 | 39 | -39 | 4 | - 9 | -19 | 28 | -16 |
| | 13 | 44 | 38 | 29 | 20 | 21 | 12 | 29 | 23 | 8 |
| | -23 | 1 | 8 | - 6 | - 6 | 1 | -11 | 25 | 52 | 51 |
| | 24 | 9 | 10 | 8 | 62 | 56 | 20 | 4 | 36 | 25 |
| | -23 | -19 | 58 | 52 | - 5 | | | | | |

## Table E4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57 | 5 | 15 | 7 | - 9 | -30 | 19 | 16 | 18 | - 0 | - 9 |
| | - 4 | 19 | - 6 | -43 | 20 | - 1 | 18 | 17 | 6 | 22 |
| | - 1 | - 7 | -10 | 2 | 5 | - 9 | 18 | - 0 | 4 | 13 |
| | 26 | - 0 | - 9 | -23 | 22 | -14 | 39 | 3 | -29 | -52 |
| | 0 | - 7 | 1 | 21 | - 3 | -18 | 11 | 6 | - 4 | -21 |
| | 41 | 30 | -21 | -36 | 16 | -19 | | | | |
| 58 | -40 | 37 | 7 | 10 | 4 | -28 | -22 | 32 | - 6 | -27 |
| | 7 | 6 | -22 | 16 | 12 | - 4 | 22 | -11 | 3 | - 7 |
| | -35 | - 5 | - 7 | -35 | -29 | -10 | - 0 | 14 | 22 | - 6 |
| | 3 | -28 | -34 | 26 | -10 | 1 | -20 | - 3 | -22 | - 7 |
| | - 5 | - 5 | - 9 | -13 | -13 | -30 | 5 | -12 | -34 | -12 |
| | 13 | 7 | 2 | -20 | -19 | - 9 | 6 | | | |
| 59 | 35 | -28 | 23 | -10 | 14 | 16 | 28 | -49 | 19 | 25 |
| | 11 | 23 | 2 | -10 | -23 | 12 | -24 | 4 | 40 | 21 |
| | 25 | 38 | 26 | 40 | 35 | 33 | 19 | 15 | 2 | 9 |
| | 7 | 25 | 18 | - 6 | 14 | 8 | - 2 | 32 | 32 | 33 |
| | 35 | 10 | -12 | 51 | 47 | 35 | 14 | 24 | 42 | 28 |
| | 14 | -10 | 17 | 37 | 24 | 35 | 2 | -22 | | |
| 60 | -12 | 4 | 30 | -12 | 26 | - 5 | 9 | -18 | 40 | - 7 |
| | 36 | 27 | - 1 | 20 | -35 | 13 | - 6 | - 2 | 27 | - 1 |
| | 0 | 20 | 33 | 11 | 6 | 12 | - 2 | 40 | 16 | 8 |
| | -11 | -11 | 8 | 5 | 16 | - 6 | 9 | 5 | 25 | 14 |
| | 19 | -13 | - 6 | 6 | 53 | 33 | - 0 | 16 | 21 | 27 |
| | - 9 | -15 | 26 | 39 | 17 | 48 | - 7 | 9 | 27 | |
| 61 | -22 | 15 | 19 | -11 | - 1 | 12 | 11 | -11 | 28 | - 4 |
| | 32 | 22 | 6 | 23 | -20 | 6 | - 1 | -21 | 24 | - 2 |
| | 3 | 21 | 29 | 16 | 13 | 16 | 1 | 29 | 17 | 2 |
| | - 6 | - 6 | 2 | 1 | - 9 | 6 | - 6 | 19 | 26 | 26 |
| | 17 | 7 | 19 | - 7 | 55 | 35 | 15 | -15 | 28 | 24 |
| | -21 | -12 | 39 | 27 | - 9 | 45 | -16 | 7 | 3 | 37 |
| 62 | -27 | -11 | 19 | -20 | 26 | 9 | 16 | -15 | 33 | 2 |
| | 34 | 25 | - 2 | 42 | -46 | 0 | - 9 | -23 | 35 | - 5 |
| | 21 | 43 | 31 | 28 | 17 | 9 | 4 | 38 | 12 | 24 |
| | -12 | - 6 | 9 | - 6 | 8 | 5 | - 4 | 13 | 28 | 40 |
| | 32 | 10 | 7 | 11 | 64 | 40 | 7 | - 6 | 28 | 23 |
| | - 8 | -18 | 47 | 43 | 2 | 68 | -17 | 10 | 33 | 56 |
| | 43 | | | | | | | | | |
| 63 | 8 | - 5 | 27 | -12 | 7 | 24 | 23 | -20 | 25 | 5 |
| | 31 | 37 | - 9 | 2 | -19 | 4 | 6 | - 6 | 41 | 12 |
| | 22 | 26 | 40 | 36 | 16 | 7 | 13 | 35 | 14 | 18 |
| | -11 | - 5 | - 3 | - 8 | 12 | 0 | 20 | 4 | - 3 | 7 |
| | 1 | - 1 | 6 | 20 | 48 | 9 | - 7 | 1 | 30 | 21 |
| | 12 | - 5 | 12 | 8 | - 2 | 29 | 14 | -11 | 33 | 33 |
| | 27 | 40 | | | | | | | | |

Table E4 Continued

| | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Row | | | | | | | | | | |
| 64 | 13 | -16 | 4 | -1 | -4 | 31 | 30 | -22 | 12 | -1 |
| | -7 | 13 | -1 | -6 | -24 | 13 | -16 | 0 | 16 | 30 |
| | 27 | 23 | 11 | 28 | 35 | 24 | 21 | -2 | -7 | 2 |
| | 21 | 28 | 19 | -18 | 17 | 16 | 8 | 8 | 21 | 12 |
| | 39 | 14 | -13 | 35 | 39 | 21 | 3 | 5 | 24 | 12 |
| | 34 | -3 | 12 | 17 | 10 | 30 | 14 | -7q | 32 | 16 |
| | 5 | 32 | 19 | | | | | | | |
| 65 | -9 | 1 | 12 | -16 | 26 | -6 | -2 | -5 | 35 | 21 |
| | 36 | 20 | -1 | 14 | -29 | 8 | -7 | -14 | 20 | -10 |
| | -12 | 5 | 13 | 12 | 1 | 22 | 6 | 41 | 20 | 1 |
| | 2 | -8 | 1 | 2 | 3 | 1 | -10 | 22 | 26 | 16 |
| | 6 | -12 | -9 | 11 | 29 | 13 | 0 | 14 | 14 | 29 |
| | -1 | -6 | 18 | 34 | 6 | 32 | -13 | 4 | 30 | 43 |
| | 27 | 34 | 29 | 10 | | | | | | |
| 66 | 41 | 4 | -4 | 31 | -21 | 56 | 26 | -24 | 6 | 21 |
| | -35 | 8 | 9 | -42 | 1 | 10 | -3 | 33 | -5 | 40 |
| | 41 | -2 | -4 | 34 | 49 | 39 | 18 | -38 | -16 | -19 |
| | 57 | 64 | 45 | -30 | 38 | 35 | 24 | 17 | 8 | -8 |
| | 50 | 24 | -25 | 70 | 3 | 14 | 13 | 10 | 11 | 5 |
| | 45 | -1 | -26 | -3 | 33 | -24 | 11 | -14 | 25 | -17 |
| | -11 | -15 | -5 | 16 | -5 | | | | | |
| 67 | 47 | -24 | 10 | 5 | 11 | 41 | 27 | -51 | 37 | 34 |
| | -14 | 13 | 17 | -20 | -17 | 12 | -26 | 19 | 21 | 27 |
| | 34 | 30 | 19 | 45 | 55 | 38 | 30 | -12 | 5 | -3 |
| | 32 | 51 | 43 | -29 | 32 | 10 | 6 | 36 | 32 | 22 |
| | 49 | 11 | -21 | 62 | 26 | 32 | 19 | 30 | 29 | 23 |
| | 32 | -7 | 4 | 34 | 33 | 25 | 6 | -21 | 62 | 16 |
| | -9 | 18 | 16 | 29 | 33 | 54 | | | | |
| 68 | 54 | 0 | -17 | 34 | -11 | 53 | 26 | -37 | 16 | 13 |
| | -40 | 8 | 15 | -27 | -6 | 19 | -5 | 24 | -17 | 27 |
| | 33 | -1 | -11 | 29 | 44 | 50 | 12 | -46 | -12 | -16 |
| | 41 | 53 | 48 | -26 | 29 | 32 | 1 | 14 | 17 | 7 |
| | 52 | 16 | -34 | 54 | 6 | 27 | 14 | 2 | 21 | 5 |
| | 32 | -19 | -9 | 18 | 25 | -5 | 2 | -11 | 22 | -6 |
| | -18 | -13 | -14 | 23 | -3 | 55 | 48 | | | |
| 69 | 48 | -20 | 5 | 9 | -8 | 40 | 41 | -58 | 28 | 20 |
| | -10 | 5 | 28 | -2 | -29 | 16 | -16 | 14 | 13 | 21 |
| | 36 | 37 | 17 | 40 | 61 | 50 | 9 | -16 | -4 | -7 |
| | 18 | 59 | 54 | -33 | 19 | 18 | -1 | 18 | 44 | 34 |
| | 52 | 20 | -16 | 41 | 33 | 51 | 21 | -4 | 38 | 27 |
| | 2 | -34 | 12 | 41 | 19 | 31 | -17 | -36 | 32 | 10 |
| | 26 | 22 | 4 | 19 | -1 | 43 | 40 | 50 | | |
| 70 | 39 | 12 | -20 | 39 | -20 | 38 | 14 | -14 | 12 | 26 |
| | -37 | 4 | 7 | -27 | 26 | 4 | 22 | 37 | -16 | 38 |
| | 16 | -9 | -15 | 10 | 18 | 35 | 30 | -39 | -5 | -9 |
| | 52 | 48 | 27 | -2 | 30 | 16 | 1 | 22 | 7 | -15 |
| | 26 | 8 | -28 | 45 | -21 | 1 | 30 | 15 | -9 | -5 |
| | 29 | 4 | -28 | -0 | 24 | -27 | 10 | -6 | 10 | -21 |
| | -26 | -36 | -27 | 7 | -5 | 59 | 33 | 55 | 19 | |

Table E4 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 71 | 2 | -11 | 4 | 11 | 21 | 28 | 32 | -15 | 4 | 12 |
| | - 3 | 3 | -16 | 21 | -16 | - 7 | -26 | - 9 | 9 | - 2 |
| | 36 | 24 | 14 | 28 | 13 | 0 | - 1 | - 3 | 3 | 13 |
| | - 2 | 17 | 12 | -32 | 11 | 14 | -12 | 1 | 3 | 36 |
| | 3 | 18 | 3 | 7 | 20 | 13 | 12 | -24 | 13 | 22 |
| | 0 | 5 | 30 | 18 | -17 | 22 | -19 | -12 | 13 | 14 |
| | 17 | 34 | 25 | 8 | 6 | - 2 | 7 | 1 | 30 | -23 |
| 72 | 18 | -21 | - 4 | - 1 | 10 | 37 | 34 | -43 | 24 | 14 |
| | -11 | 18 | - 0 | 22 | -23 | 4 | -23 | 4 | 6 | 13 |
| | 43 | 33 | 3 | 41 | 42 | 20 | 18 | -13 | 10 | - 7 |
| | 10 | 42 | 34 | -42 | 14 | 16 | -13 | 34 | 27 | 40 |
| | 34 | 28 | 3 | 29 | 32 | 38 | 23 | -31 | 23 | 24 |
| | 2 | - 7 | 25 | 36 | -12 | 37 | -22 | - 6 | 32 | 13 |
| | 22 | 39 | 13 | 22 | 4 | 20 | 37 | 30 | 33 | - 2 |
| | 39 | | | | | | | | | |
| 73 | -10 | -11 | - 3 | -12 | 17 | - 1 | - 4 | - 2 | 7 | 6 |
| | - 6 | -10 | 6 | 8 | 7 | -11 | 0 | 7 | - 8 | -16 |
| | - 4 | - 1 | -13 | -11 | -11 | -16 | - 6 | - 4 | - 4 | 14 |
| | - 4 | -11 | - 9 | - 1 | - 2 | - 4 | - 3 | 8 | 6 | 10 |
| | - 3 | - 3 | 12 | -11 | - 0 | 0 | 14 | - 3 | - 4 | 13 |
| | - 3 | 1 | 26 | 12 | - 0 | 28 | - 3 | 2 | 4 | 2 |
| | - 7 | 9 | - 2 | - 1 | - 4 | -10 | 3 | - 6 | -11 | 6 |
| | 6 | 2 | | | | | | | | |
| 74 | 6 | - 8 | 9 | 4 | 32 | 3 | 13 | -31 | 33 | 7 |
| | 29 | 23 | 13 | 20 | - 3 | 8 | -11 | - 3 | 23 | - 8 |
| | 27 | 42 | 24 | 38 | 27 | 17 | 23 | 30 | 33 | 9 |
| | -11 | 6 | 16 | -13 | - 4 | 3 | -10 | 18 | 28 | 47 |
| | 13 | 11 | 4 | 8 | 47 | 23 | 29 | - 8 | 29 | 26 |
| | -10 | -12 | 30 | 32 | 3 | 34 | -26 | 4 | 33 | 33 |
| | 33 | 33 | 28 | 19 | 22 | -13 | 17 | 6 | 30 | -21 |
| | 36 | 49 | 12 | | | | | | | |
| 75 | 37 | 16 | -13 | 32 | 3 | 32 | 23 | -27 | 31 | 15 |
| | -27 | 13 | 11 | -17 | 1 | 2 | 14 | 37 | 8 | 39 |
| | 38 | 23 | 2 | 42 | 30 | 61 | 41 | -26 | 4 | -16 |
| | 42 | 70 | 38 | -32 | 19 | 27 | - 2 | 22 | 13 | 27 |
| | 30 | 33 | -18 | 47 | 15 | 29 | 28 | - 7 | 21 | 14 |
| | 21 | -19 | - 6 | 13 | 23 | 10 | -11 | - 9 | 17 | - 3 |
| | 11 | 10 | - 3 | 16 | 1 | 34 | 30 | 37 | 39 | 40 |
| | 11 | 41 | -19 | 20 | | | | | | |
| 76 | 27 | 11 | 13 | 17 | - 2 | 23 | 9 | -41 | 31 | 3 |
| | 13 | 13 | 23 | -14 | - 2 | 6 | 18 | 16 | - 2 | 18 |
| | - 3 | - 3 | 11 | 11 | 24 | 44 | 14 | 11 | 1 | - 8 |
| | 33 | 24 | 12 | 28 | 20 | 3 | 9 | 17 | 29 | 16 |
| | 42 | -18 | -29 | 33 | 23 | 29 | 31 | 23 | 9 | 17 |
| | 9 | -21 | - 1 | 28 | 34 | 13 | - 4 | 3 | 28 | 23 |
| | 15 | 11 | - 4 | 13 | 7 | 33 | 23 | 33 | 31 | 46 |
| | -20 | - 3 | 14 | 17 | 30 | | | | | |

### Table E4 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 19 | - 6 | - 6 | 18 | 1 | 42 | 29 | -29 | 27 | 2 |
| | -17 | 13 | -18 | - 1 | 3 | 6 | -11 | 23 | 3 | 31 |
| | 35 | 48 | 6 | 30 | 56 | 18 | 35 | -21 | 5 | 2 |
| | 42 | 51 | 41 | -36 | 26 | 19 | - 9 | 17 | - 0 | 23 |
| | 35 | 25 | 2 | 34 | 14 | 15 | 22 | -24 | 13 | 8 |
| | 25 | 7 | 3 | 4 | - 0 | 11 | - 5 | - 1 | 11 | 1 |
| | 6 | 19 | 10 | 16 | - 7 | 30 | 29 | 28 | 39 | 31 |
| | 31 | 62 | 2 | 24 | 55 | 7 | | | | |
| 78 | -35 | 10 | 4 | 4 | 26 | 5 | 19 | - 6 | 18 | - 7 |
| | 18 | 21 | -15 | 33 | -19 | 5 | -11 | -15 | 15 | -13 |
| | 28 | 39 | 11 | 21 | 14 | - 6 | 12 | 23 | 12 | 17 |
| | - 3 | - 5 | 15 | -17 | - 1 | 18 | -11 | 17 | 12 | 34 |
| | 24 | 21 | 10 | 3 | 39 | 15 | 10 | -23 | 8 | 14 |
| | - 6 | - 8 | 46 | 18 | -19 | 47 | -23 | 28 | 14 | 31 |
| | 35 | 69 | 23 | 18 | 17 | -12 | 2 | -14 | 5 | -34 |
| | 38 | 46 | 16 | 56 | 10 | - 8 | 27 | | | |
| 79 | 4 | -20 | - 2 | - 5 | 17 | 32 | 34 | -45 | 32 | 17 |
| | 6 | 27 | 8 | 17 | -35 | 13 | -28 | 4 | 14 | 9 |
| | 39 | 50 | 16 | 34 | 45 | 19 | 11 | 2 | 2 | 2 |
| | 10 | 36 | 35 | -32 | 12 | 12 | 2 | 29 | 37 | 41 |
| | 54 | 28 | 1 | 30 | 58 | 49 | 21 | - 8 | 39 | 29 |
| | - 1 | -13 | 39 | 47 | 12 | 54 | -22 | -19 | 39 | 40 |
| | 33 | 56 | 14 | 40 | 21 | 16 | 39 | 25 | 49 | - 2 |
| | 39 | 68 | 15 | 55 | 32 | 17 | 47 | 51 | | |
| 80 | 7 | - 2 | 17 | - 7 | 25 | 12 | 22 | -35 | 32 | 11 |
| | 25 | 22 | 10 | 11 | -17 | 18 | -20 | 3 | 39 | 10 |
| | 23 | 28 | 44 | 26 | 31 | 9 | 19 | 24 | 11 | 4 |
| | - 9 | 17 | 30 | - 7 | 1 | 6 | 5 | 9 | 19 | 42 |
| | 28 | 22 | - 5 | 19 | 45 | 35 | 22 | 10 | 34 | 20 |
| | - 6 | 3 | 39 | 31 | 16 | 50 | -31 | -12 | 29 | 39 |
| | 43 | 46 | 30 | 16 | 29 | 1 | 23 | 0 | 34 | -15 |
| | 32 | 26 | 12 | 55 | 20 | 15 | 15 | 37 | 51 | |
| 81 | 5 | 55 | 6 | 20 | 5 | 10 | -12 | 6 | 15 | - 4 |
| | - 7 | 24 | - 5 | -31 | 42 | - 7 | 45 | 29 | - 2 | 26 |
| | -20 | -17 | 1 | -10 | - 0 | 12 | 42 | 2 | 20 | 10 |
| | 34 | 11 | 3 | 1 | 8 | - 3 | 13 | 3 | -28 | -15 |
| | - 3 | -12 | -13 | 3 | - 8 | -27 | 26 | 4 | -29 | -14 |
| | 13 | 20 | -11 | -34 | 18 | -16 | 19 | 18 | -17 | - 8 |
| | 1 | -18 | - 3 | - 6 | 4 | 16 | - 4 | 2 | -13 | 41 |
| | -23 | -26 | 4 | - 3 | 29 | 28 | 7 | - 9 | -22 | - 7 |

Table E4 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 82 | 20 | - 5 | - 5 | 24 | -15 | 43 | 34 | - 5 | -11 | 6 |
| | -33 | 6 | - 0 | - 7 | - 4 | 2 | -12 | 13 | -10 | 10 |
| | 50 | 4 | -16 | 37 | 30 | 15 | - 1 | -39 | -11 | -13 |
| | 27 | 44 | 43 | -39 | 24 | 31 | - 2 | 4 | 3 | 6 |
| | 21 | 22 | - 5 | 34 | -11 | 28 | - 5 | -17 | 3 | 0 |
| | 22 | - 3 | -15 | 8 | 10 | -12 | 3 | -16 | 5 | - 8 |
| | 0 | - 7 | - 5 | 2 | -12 | 49 | 25 | 33 | 33 | 21 |
| | 20 | 28 | -24 | -18 | 35 | -13 | 20 | 4 | 10 | - 8 |
| | -13 | | | | | | | | | |
| 83 | 7 | 14 | 22 | - 1 | 32 | 12 | 9 | -32 | 40 | 7 |
| | 13 | 10 | - 5 | 8 | -16 | 6 | - 0 | - 1 | 23 | 14 |
| | - 6 | 14 | 32 | 3 | 28 | 34 | 5 | 15 | 21 | 1 |
| | 22 | 15 | 16 | 16 | - 3 | - 5 | - 8 | 22 | 27 | 27 |
| | 35 | 12 | - 6 | 18 | 37 | 21 | 23 | 15 | 13 | 11 |
| | - 3 | -12 | 25 | 18 | 14 | 41 | -17 | 11 | 27 | 34 |
| | 27 | 33 | - 6 | 12 | 25 | 8 | 26 | 19 | 30 | 13 |
| | - 2 | 18 | 15 | 28 | 27 | 51 | 20 | 17 | 36 | 36 |
| | 12 | -19 | | | | | | | | |
| 84 | 1 | 19 | 11 | 6 | - 9 | -27 | -20 | 10 | - 7 | - 8 |
| | 19 | - 1 | 2 | - 4 | 7 | 1 | 25 | - 8 | - 6 | -25 |
| | -40 | -28 | - 7 | -18 | -26 | 14 | 3 | 15 | 12 | - 4 |
| | - 5 | -24 | -24 | 37 | - 5 | - 1 | - 5 | 2 | 11 | -12 |
| | -22 | -35 | -39 | - 3 | -23 | - 9 | - 2 | 15 | - 8 | - 6 |
| | - 6 | - 8 | -23 | - 2 | - 5 | - 8 | 3 | 17 | -15 | - 1 |
| | -12 | -23 | - 9 | -12 | 13 | - 7 | - 7 | - 4 | -10 | 5 |
| | -29 | -28 | -25 | -10 | -10 | 19 | -27 | -28 | -36 | -18 |
| | 10 | - 8 | - 4 | | | | | | | |
| 85 | 3 | 18 | 7 | 0 | 13 | 22 | - 4 | -12 | 16 | 19 |
| | 10 | 22 | - 7 | - 9 | 12 | -20 | 26 | 16 | 14 | 26 |
| | -12 | -10 | 2 | - 5 | - 6 | 21 | 30 | 18 | 1 | 8 |
| | 31 | 8 | - 3 | 20 | 12 | - 8 | 16 | 18 | 4 | -16 |
| | 6 | 6 | - 4 | 18 | - 1 | - 6 | 26 | 29 | -13 | -11 |
| | 20 | 21 | - 0 | - 2 | 14 | 9 | 13 | - 0 | 13 | 1 |
| | 5 | - 0 | 5 | 14 | 23 | 22 | 25 | - 2 | - 6 | 41 |
| | -22 | -16 | 15 | - 9 | 10 | 37 | - 4 | - 9 | - 2 | 10 |
| | 40 | -12 | 33 | 8 | | | | | | |
| 86 | 8 | 33 | 42 | - 2 | 16 | 20 | 8 | -25 | 36 | 4 |
| | 21 | 34 | - 2 | -13 | - 3 | 0 | 19 | 6 | 52 | 25 |
| | - 5 | 23 | 36 | 11 | 23 | 31 | 34 | 26 | 29 | 17 |
| | 20 | 15 | 4 | - 9 | 7 | - 3 | 8 | 17 | 2 | 19 |
| | 29 | 12 | -11 | 30 | 42 | 6 | 25 | 10 | 14 | 22 |
| | 12 | 8 | 16 | - 9 | 14 | 37 | 11 | 20 | 27 | 26 |
| | 25 | 35 | 31 | 24 | 29 | 14 | 30 | 6 | 12 | 1 |
| | 5 | 13 | 8 | 30 | 29 | 26 | 14 | 23 | 22 | 29 |
| | 29 | -21 | 42 | 7 | 26 | | | | | |

### Table E4 Continued

Factor

| Rpw | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 87 | - 1 | 23 | - 3 | 21 | 20 | 26 | 10 | - 1 | 17 | 17 |
| | -10 | 17 | -42 | -23 | 23 | - 7 | - 1 | 21 | 15 | 22 |
| | 12 | 8 | 5 | 6 | 29 | 13 | 37 | - 9 | - 3 | - 2 |
| | 46 | 24 | 14 | - 6 | 11 | - 1 | 18 | 6 | -17 | - 1 |
| | - 7 | 28 | 3 | 15 | - 7 | -14 | 14 | - 4 | -12 | - 8 |
| | 21 | 30 | 0 | -27 | 18 | - 4 | 5 | 8 | 3 | - 0 |
| | - 2 | - 3 | 5 | 0 | 5 | 27 | 12 | - 0 | 1 | 23 |
| | 5 | 14 | - 4 | 2 | 31 | 10 | 37 | 14 | 9 | 6 |
| | 28 | 12 | 26 | 1 | 33 | 22 | | | | |
| 88 | 18 | -10 | 12 | -11 | 0 | 37 | 45 | -32 | 39 | 12 |
| | 4 | 22 | 22 | - 4 | -31 | 22 | -15 | - 1 | 21 | 24 |
| | 38 | 30 | 39 | 37 | 35 | 20 | 11 | - 3 | 13 | - 4 |
| | 13 | 29 | 32 | -19 | 15 | 13 | 27 | 33 | 28 | 9 |
| | 45 | 20 | 5 | 39 | 51 | 46 | 12 | 19 | 24 | 24 |
| | 12 | - 8 | 19 | 27 | 26 | 39 | - 3 | -13 | 28 | 33 |
| | 37 | 40 | 32 | 25 | 13 | 27 | 27 | 14 | 32 | - 3 |
| | 10 | 36 | 8 | 26 | 20 | 23 | 23 | 31 | 46 | 46 |
| | - 9 | 12 | 31 | -28 | 8 | 26 | 4 | | | |
| 89 | -12 | 40 | 5 | 20 | -26 | 19 | -11 | 18 | 2 | - 6 |
| | -12 | 17 | -14 | -34 | 35 | - 6 | 28 | 22 | - 2 | 24 |
| | -14 | -17 | -14 | -16 | 5 | 15 | 26 | -16 | - 6 | 11 |
| | 45 | 6 | - 3 | -11 | 19 | 6 | 18 | - 8 | -32 | -36 |
| | 1 | - 1 | 12 | 3 | -26 | -36 | 0 | -10 | -32 | -13 |
| | 25 | 22 | -28 | -46 | 8 | -42 | 34 | 19 | -25 | -15 |
| | - 1 | -24 | - 9 | -18 | -14 | 29 | - 2 | 5 | -12 | 30 |
| | -26 | -19 | - 2 | -29 | 15 | 13 | 17 | -20 | -26 | -35 |
| | 42 | 10 | 1 | 9 | 17 | 19 | 32 | -11 | | |
| 90 | 46 | -11 | 11 | 15 | 8 | 45 | 50 | -48 | 14 | 24 |
| | -17 | 8 | 9 | -24 | 0 | 3 | -16 | 13 | 29 | 34 |
| | 64 | 34 | 19 | 64 | 53 | 18 | 24 | -16 | 3 | - 6 |
| | 17 | 52 | 48 | -40 | 6 | 15 | - 5 | 18 | 9 | 44 |
| | 33 | 37 | - 9 | 50 | 33 | 31 | 21 | - 3 | 23 | 19 |
| | 14 | 2 | 15 | 11 | 20 | 22 | - 8 | -40 | 40 | - 5 |
| | 8 | 11 | 17 | 24 | 2 | 36 | 46 | 37 | 51 | 20 |
| | 38 | 43 | 3 | 33 | 46 | 4 | 32 | 13 | 45 | 41 |
| | - 3 | 37 | 9 | -25 | - 4 | 22 | 10 | 26 | -17 | |
| 91 | 26 | -25 | 13 | 9 | 13 | 8 | 25 | -41 | 27 | 22 |
| | 12 | 1 | 10 | 1 | -46 | 14 | -21 | -10 | 17 | - 0 |
| | 6 | 7 | 31 | 10 | 30 | 40 | - 0 | 10 | 6 | 2 |
| | 15 | 19 | 21 | 18 | 14 | 8 | 12 | 29 | 49 | 23 |
| | 34 | - 3 | -18 | 27 | 41 | 46 | 15 | 29 | 33 | 39 |
| | -12 | -38 | 18 | 48 | 32 | 37 | -28 | -16 | 43 | 39 |
| | 25 | 29 | 3 | 10 | 26 | 19 | 33 | 26 | 44 | 21 |
| | - 1 | 19 | 13 | 24 | 16 | 62 | 7 | 5 | 38 | 37 |
| | - 6 | - 6 | 59 | 7 | 24 | 14 | 14 | 42 | -13 | 16 |

## Table E4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 92 | 50 | 2 | 4 | 17 | 17 | 44 | 31 | -66 | 22 | 25 |
| | -14 | 15 | 17 | -28 | - 3 | - 4 | - 7 | 31 | 19 | 36 |
| | 29 | 35 | 17 | 35 | 60 | 38 | 33 | -11 | 7 | 1 |
| | 41 | 59 | 51 | -20 | 19 | 11 | 20 | 31 | 19 | 29 |
| | 43 | 14 | -18 | 42 | 27 | 40 | 30 | 22 | 28 | 26 |
| | 14 | -18 | 2 | 24 | 44 | 20 | - 6 | -20 | 43 | 8 |
| | 11 | 15 | 8 | 13 | 9 | 48 | 59 | 42 | 62 | 34 |
| | 18 | 43 | 6 | 29 | 62 | 38 | 41 | 7 | 43 | 36 |
| | 15 | 23 | 40 | -10 | 28 | 34 | 36 | 36 | 1 | 53 |
| | 44 | | | | | | | | | |
| 93 | 46 | - 5 | - 4 | - 1 | 8 | 29 | 5 | -37 | 27 | 12 |
| | - 5 | 7 | 32 | -22 | -13 | - 7 | 7 | 18 | 1 | 26 |
| | 11 | - 1 | 6 | 24 | 32 | 53 | 13 | 0 | 14 | -22 |
| | 24 | 43 | 32 | - 3 | 15 | 6 | 13 | 21 | 38 | - 5 |
| | 33 | - 0 | -17 | 37 | 19 | 42 | 22 | 31 | 26 | 22 |
| | 1 | -23 | - 0 | 34 | 29 | 16 | - 9 | -18 | 31 | 21 |
| | -10 | 3 | - 2 | 19 | 25 | 46 | 44 | 44 | 43 | 47 |
| | -11 | 16 | 6 | 13 | 45 | 59 | 9 | -19 | 19 | 24 |
| | 19 | - 1 | 41 | 8 | 34 | 27 | 7 | 28 | 2 | 18 |
| | 55 | 51 | | | | | | | | |
| 94 | 15 | -18 | -17 | 14 | -11 | 17 | 12 | -13 | 10 | 7 |
| | - 7 | - 4 | 38 | 20 | -27 | 24 | - 6 | 6 | -20 | -10 |
| | 18 | - 9 | - 3 | 12 | 3 | 23 | - 6 | -15 | 1 | -11 |
| | 1 | 26 | 22 | - 8 | 13 | 15 | -13 | 15 | 41 | 8 |
| | 41 | - 7 | -12 | 24 | 4 | 30 | 7 | 11 | 14 | 12 |
| | 11 | -25 | - 0 | 43 | - 1 | 10 | -24 | - 9 | - 0 | 5 |
| | 7 | 11 | -18 | 13 | 13 | 20 | 20 | 31 | 27 | 16 |
| | 8 | 19 | 3 | 15 | 17 | 23 | 0 | 6 | 26 | 18 |
| | -20 | 14 | 9 | - 1 | - 2 | -10 | -49 | 26 | -17 | 2 |
| | 16 | 5 | 25 | | | | | | | |
| 95 | -15 | - 8 | 24 | 10 | 9 | - 9 | - 8 | - 2 | 23 | - 3 |
| | 33 | 29 | 11 | 25 | -27 | 7 | 1 | -11 | 29 | -26 |
| | - 3 | 1 | 24 | 4 | - 0 | 9 | 16 | 31 | 12 | 15 |
| | -10 | -17 | -11 | 10 | 20 | 2 | 14 | - 1 | 20 | 14 |
| | 11 | -14 | -10 | 1 | 27 | 8 | 1 | 4 | 12 | 23 |
| | 8 | -12 | 1 | 27 | 8 | 28 | -11 | 5 | 10 | 41 |
| | 8 | 35 | 32 | 8 | 24 | - 9 | 10 | - 9 | 1 | -16 |
| | 3 | 3 | 3 | 24 | - 9 | 21 | 2 | 17 | 19 | 22 |
| | -10 | - 7 | 11 | 25 | - 0 | 15 | - 5 | 9 | - 4 | - 9 |
| | 28 | - 4 | - 2 | 14 | | | | | | |
| 96 | -32 | 4 | 14 | - 9 | -23 | -20 | - 8 | 1 | 25 | - 2 |
| | 49 | 12 | 14 | -29 | - 7 | - 8 | -19 | -21 | -17 | -38 |
| | -18 | -18 | 26 | - 8 | -16 | - 9 | 18 | 54 | 19 | 8 |
| | -13 | -38 | -22 | -16 | - 7 | -13 | 7 | 4 | 12 | 9 |
| | - 9 | -14 | 4 | -23 | -24 | - 4 | 10 | 7 | 2 | 13 |
| | -15 | - 6 | 25 | 14 | - 3 | 39 | - 7 | 19 | - 2 | 34 |
| | -25 | 37 | 23 | 2 | -32 | -39 | -11 | -38 | -17 | -31 |
| | - 2 | - 7 | 12 | 36 | -23 | 10 | - 7 | 35 | 14 | 23 |
| | 5 | -32 | 22 | - 0 | 12 | 15 | 5 | 14 | -16 | -23 |
| | 14 | - 7 | -15 | -10 | 43 | | | | | |

### Table E4 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 97 | 21 | 16 | - 1 | 14 | -37 | 10 | -10 | 15 | -17 | - 0 |
| | -37 | 2 | - 5 | -34 | 34 | 15 | 24 | 25 | -15 | 23 |
| | -16 | -30 | -16 | -16 | 3 | 14 | 10 | -41 | - 7 | - 5 |
| | 36 | 14 | -11 | 3 | 12 | 1 | 11 | -10 | -24 | -33 |
| | - 2 | - 7 | -13 | 14 | -36 | -36 | 3 | - 4 | -22 | -33 |
| | 35 | 18 | -51 | -42 | 11 | -52 | 39 | 9 | -21 | -42 |
| | -31 | -58 | -25 | - 4 | -26 | 35 | - 0 | 18 | -12 | 45 |
| | -40 | -33 | -10 | -48 | 11 | 15 | 10 | -51 | -46 | -49 |
| | 41 | 6 | -15 | 23 | 14 | - 1 | 14 | -17 | 51 | -15 |
| | -19 | - 5 | 2 | - 8 | -22 | -40 | | | | |
| 98 | -19 | 32 | - 0 | 8 | -14 | 10 | 13 | 20 | - 2 | 5 |
| | -10 | 27 | -25 | - 6 | 16 | 2 | 6 | 3 | 7 | 18 |
| | 8 | - 6 | -13 | 3 | - 1 | - 2 | 24 | - 8 | -10 | - 1 |
| | 32 | - 7 | - 1 | -14 | 10 | 14 | 4 | - 0 | -19 | -19 |
| | - 2 | 12 | 18 | 3 | -10 | -28 | - 9 | -18 | -21 | -30 |
| | 25 | 31 | -11 | -27 | - 8 | -17 | 29 | 8 | - 9 | - 2 |
| | 2 | -11 | 7 | 8 | 2 | 8 | - 8 | - 5 | -14 | 9 |
| | - 2 | - 6 | -10 | -21 | - 2 | -20 | 5 | 6 | - 9 | -20 |
| | 21 | 23 | -12 | - 6 | 20 | - 5 | 27 | 1 | 28 | - 4 |
| | -23 | - 4 | -28 | -23 | - 5 | 12 | 23 | | | |
| 99 | 37 | -47 | - 1 | -10 | 0 | 24 | 37 | -38 | 24 | 22 |
| | 0 | - 4 | 24 | - 5 | -43 | 31 | -41 | - 9 | - 2 | 8 |
| | 44 | 28 | 22 | 38 | 53 | 16 | -15 | - 6 | 7 | - 0 |
| | - 1 | 40 | 43 | -28 | 19 | 10 | 15 | 26 | 47 | 16 |
| | 45 | 9 | - 7 | 40 | 39 | 53 | 14 | 11 | 54 | 32 |
| | - 8 | -33 | 12 | 45 | 20 | 29 | - 6 | -37 | 34 | 20 |
| | 15 | 26 | 6 | 28 | 4 | 28 | 39 | 28 | 48 | 2 |
| | 18 | 42 | - 2 | 32 | 22 | 17 | 23 | 16 | 53 | 32 |
| | -36 | 19 | 15 | -18 | -22 | - 0 | -17 | 53 | -36 | 35 |
| | 41 | 29 | 33 | 36 | 5 | -10 | -19 | -32 | | |
| 100 | -30 | 50 | 8 | 6 | - 1 | 2 | -10 | 23 | -11 | -16 |
| | 4 | 22 | -23 | 1 | 17 | - 1 | 27 | 5 | 4 | 7 |
| | -22 | -18 | 3 | -16 | -24 | 8 | 14 | 10 | - 3 | 10 |
| | 22 | -20 | - 9 | 29 | - 0 | 9 | 15 | -11 | -21 | -14 |
| | -13 | - 5 | - 2 | -17 | - 9 | -19 | -11 | 3 | -26 | -27 |
| | 10 | 18 | -10 | -21 | - 5 | -11 | 3 | 20 | -19 | 7 |
| | 13 | 5 | 16 | - 8 | 13 | - 2 | -23 | -22 | -26 | 2 |
| | -13 | -33 | -13 | -22 | - 7 | 8 | -11 | 4 | -26 | 4 |
| | 37 | 1 | 9 | 22 | 39 | 3 | 24 | - 0 | 32 | -26 |
| | - 4 | - 7 | - 6 | -11 | 1 | 10 | 14 | 33 | -47 | |

## Table E5

## Correlation Matrix by Rows Below Diagonal for JCES Item Percents 2, 5, 8, ---, 299

Factor

| Row | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 26 | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | -11 | -19 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 14 | 29 | -21 | | | | | | | | | | | | | | | | | | | | | |
| 5 | 11 | 18 | -41 | 19 | | | | | | | | | | | | | | | | | | | | |
| 6 | 34 | 26 | -53 | 31 | 39 | | | | | | | | | | | | | | | | | | | |
| 7 | 7 | 7 | 14 | 44 | -21 | 4 | | | | | | | | | | | | | | | | | | |
| 8 | -15 | 8 | -17 | 7 | 39 | 27 | -8 | | | | | | | | | | | | | | | | | |
| 9 | -30 | -8 | 41 | -11 | -6 | -36 | 17 | 18 | | | | | | | | | | | | | | | | |
| 10 | -7 | 10 | -33 | 29 | 42 | 37 | -5 | 43 | 8 | | | | | | | | | | | | | | | |
| 11 | 8 | 23 | -13 | 19 | 7 | 30 | 16 | -5 | -11 | 13 | | | | | | | | | | | | | | |
| 12 | 3 | 27 | -44 | 9 | 47 | 50 | -18 | 46 | -9 | 54 | 21 | | | | | | | | | | | | | |
| 13 | 15 | 32 | -3 | 30 | 17 | 30 | 25 | 18 | -2 | 17 | 45 | 21 | | | | | | | | | | | | |
| 14 | 2 | 12 | 18 | 16 | 1 | 10 | 28 | 27 | 23 | 20 | 17 | 10 | 38 | | | | | | | | | | | |
| 15 | -4 | 2 | 33 | -9 | 1 | -5 | -2 | 33 | 45 | 22 | -17 | -3 | 10 | 30 | | | | | | | | | | |
| 16 | -17 | -5 | 21 | 2 | -4 | -7 | 18 | 38 | 44 | 23 | 6 | 14 | 22 | 62 | 47 | | | | | | | | | |
| 17 | -3 | -6 | -27 | 23 | 23 | 38 | 9 | 60 | 16 | 40 | -0 | 41 | 2 | 16 | 11 | 22 | | | | | | | | |
| 18 | 4 | -2 | 22 | 19 | -29 | -17 | 25 | -5 | 13 | -14 | 19 | -23 | 21 | 27 | 5 | 32 | -4 | | | | | | | |
| 19 | -2 | 8 | 52 | -7 | -13 | -36 | 10 | -4 | 42 | -7 | -15 | -14 | 0 | 20 | 35 | 33 | -8 | 4 | | | | | | |
| 20 | 22 | 11 | -21 | 37 | 21 | 29 | 28 | 20 | 1 | 53 | 18 | 26 | 26 | 29 | -4 | 27 | 27 | 12 | 6 | | | | | |
| 21 | 12 | -0 | 14 | 13 | 2 | 13 | 40 | 0 | 25 | -2 | 34 | -8 | 26 | 22 | 16 | 21 | 6 | 15 | 16 | 31 | | | | |
| 22 | 31 | 46 | -12 | 45 | 18 | 37 | 32 | 16 | -7 | 19 | 32 | 20 | 50 | 15 | 15 | 8 | 0 | 17 | -9 | 14 | 11 | | | |
| 23 | 18 | 24 | 18 | 10 | 11 | -8 | -12 | -6 | 14 | -8 | 0 | 8 | 11 | 0 | 18 | -9 | -7 | -9 | 10 | -20 | -1 | 14 | | |
| 24 | -11 | 8 | -1 | -10 | 22 | 11 | -4 | 49 | 36 | 35 | 8 | 39 | 8 | 27 | 39 | 49 | 36 | 5 | 20 | 14 | 4 | 12 | -8 | |
| 25 | 18 | 37 | -9 | 29 | 13 | 39 | 38 | 17 | -11 | 18 | 36 | 14 | 38 | 27 | 14 | 20 | 15 | 15 | -8 | 17 | 16 | 53 | -13 | 25 |

### Table E5 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 26 | -14 | 15 | 41 | 5 | -10 | -14 | 30 | 13 | 46 | - 3 |
| | 12 | -14 | 22 | 42 | 44 | 47 | - 6 | 34 | 33 | 8 |
| | 34 | 8 | 2 | 31 | 17 | | | | | |
| 27 | - 7 | 4 | - 4 | 5 | 20 | 24 | 7 | 68 | 33 | 41 |
| | 9 | 47 | 17 | 34 | 39 | 54 | 62 | 2 | 9 | 25 |
| | 14 | 15 | -10 | 74 | 33 | 27 | | | | |
| 28 | 1 | 22 | 0 | 1 | 6 | 16 | - 0 | 31 | 17 | 19 |
| | 26 | 30 | 39 | 37 | 6 | 28 | 9 | 5 | 7 | 17 |
| | 5 | 21 | -10 | 25 | 28 | 23 | 39 | | | |
| 29 | 8 | 15 | -37 | 24 | 35 | 49 | - 6 | 36 | -14 | 47 |
| | 40 | 73 | 36 | 8 | -13 | 9 | 34 | - 6 | -23 | 33 |
| | 2 | 29 | - 1 | 20 | 24 | -23 | 38 | 37 | | |
| 30 | 36 | 26 | - 6 | 18 | 5 | 44 | 8 | -20 | -26 | - 2 |
| | 20 | 8 | 25 | 2 | -12 | -19 | -12 | - 3 | -19 | 7 |
| | 10 | 33 | 10 | -19 | 25 | - 7 | -16 | 11 | 9 | |
| 31 | 4 | 25 | -22 | 21 | 42 | 53 | 2 | 55 | 11 | 57 |
| | 12 | 67 | 27 | 35 | 28 | 34 | 53 | -14 | 9 | 33 |
| | 10 | 25 | - 8 | 56 | 30 | 15 | 61 | 28 | 40 | 10 |
| 32 | - 5 | -14 | 54 | - 5 | -27 | -44 | 24 | - 9 | 41 | -29 |
| | -11 | -45 | - 2 | 11 | 42 | 33 | -21 | 32 | 46 | - 8 |
| | 27 | - 8 | 16 | - 2 | - 6 | 46 | - 2 | - 8 | -43 | -15 |
| | -21 | | | | | | | | | |
| 33 | - 1 | 11 | -37 | 20 | 26 | 22 | -21 | 28 | -19 | 39 |
| | - 2 | 25 | - 5 | 7 | - 2 | 7 | 32 | 1 | -11 | 16 |
| | -28 | 2 | -10 | 26 | 4 | -16 | 16 | 4 | 22 | - 3 |
| | 33 | -29 | | | | | | | | |
| 34 | 16 | 31 | -32 | 20 | 53 | 33 | - 7 | 47 | - 1 | 41 |
| | 14 | 54 | 14 | 13 | - 1 | 18 | 35 | -15 | 1 | 19 |
| | -11 | 27 | 7 | 44 | 29 | - 4 | 34 | 19 | 45 | -10 |
| | 50 | -35 | 34 | | | | | | | |
| 35 | -18 | - 1 | 0 | 11 | 12 | 12 | 9 | 36 | 21 | 40 |
| | - 7 | 33 | 2 | 24 | 30 | 32 | 45 | -13 | 10 | 14 |
| | - 0 | 8 | 9 | 27 | - 6 | 3 | 30 | - 7 | 17 | -13 |
| | 43 | - 4 | 10 | 26 | | | | | | |
| 36 | -18 | 2 | 9 | 7 | 17 | 22 | 4 | 48 | 38 | 45 |
| | 16 | 41 | 6 | 36 | 29 | 49 | 51 | 13 | 15 | 26 |
| | 15 | 10 | - 1 | 61 | 16 | 26 | 65 | 22 | 36 | -14 |
| | 60 | - 7 | 25 | 35 | 43 | | | | | |
| 37 | -25 | 1 | - 6 | 20 | - 6 | 11 | 32 | 28 | 11 | 24 |
| | 33 | 25 | 36 | 33 | -10 | 37 | 34 | 17 | 9 | 37 |
| | 13 | 17 | -18 | 36 | 20 | 11 | 35 | 23 | 30 | -10 |
| | 39 | - 9 | 27 | 23 | 32 | 47 | | | | |
| 38 | 28 | 22 | -35 | 28 | 17 | 53 | 25 | 12 | -18 | 28 |
| | 17 | 38 | 28 | 24 | - 0 | 5 | 36 | - 5 | - 7 | 26 |
| | 20 | 23 | 4 | 19 | 41 | - 7 | 25 | 9 | 31 | 14 |
| | 47 | -25 | 20 | 36 | 13 | 20 | 26 | | | |

### Table E5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 8 | 1 | 1 | 1 | 26 | 10 | 14 | 16 | 31 | 16 |
| | 4 | 22 | - 9 | 15 | 2 | 21 | 34 | -16 | 28 | 34 |
| | 39 | -20 | 5 | 30 | - 1 | 18 | 28 | 5 | - 0 | - 5 |
| | 31 | 3 | - 7 | 15 | 17 | 27 | 16 | 15 | | |
| 40 | 20 | 30 | -16 | 36 | 30 | 45 | 27 | 19 | -14 | 22 |
| | 45 | 26 | 46 | 25 | - 6 | 5 | 17 | 8 | -10 | 32 |
| | 25 | 44 | 2 | 5 | 48 | 6 | 8 | 15 | 42 | 27 |
| | 22 | -13 | 12 | 28 | 20 | 20 | 29 | 31 | 8 | |
| 41 | -17 | -10 | 7 | 8 | - 3 | 6 | 15 | 38 | 22 | 19 |
| | 4 | 18 | 9 | 10 | 9 | 20 | 48 | -11 | 10 | 5 |
| | - 6 | 1 | -18 | 42 | 14 | 4 | 49 | 2 | 22 | -19 |
| | 26 | -11 | 14 | 28 | 28 | 36 | 41 | 18 | 11 | 14 |
| 42 | 15 | 1 | 4 | - 2 | 18 | 10 | 7 | 8 | 21 | 9 |
| | - 4 | - 3 | 10 | 25 | 27 | 11 | 13 | - 9 | 13 | 15 |
| | 28 | 10 | 12 | 20 | - 1 | 16 | 18 | 18 | -13 | 18 |
| | 20 | 5 | - 6 | - 6 | 5 | 22 | - 3 | 7 | 18 | 11 |
| | -14 | | | | | | | | | |
| 43 | 23 | 27 | -28 | 39 | 7 | 47 | 18 | 8 | -20 | 9 |
| | 44 | 36 | 25 | - 6 | -16 | -12 | 25 | 5 | -20 | 15 |
| | 7 | 30 | 1 | 14 | 31 | 2 | 20 | 14 | 43 | 29 |
| | 28 | -17 | 11 | 20 | 3 | 15 | 26 | 40 | 5 | 39 |
| | 24 | 1 | | | | | | | | |
| 44 | 18 | 19 | - 8 | 16 | 15 | 26 | 5 | 6 | -26 | 10 |
| | 33 | 15 | 28 | 3 | - 9 | - 4 | - 8 | 2 | -11 | 9 |
| | 12 | 25 | 6 | 8 | 35 | - 4 | - 0 | 20 | 22 | 9 |
| | 10 | 1 | 8 | 20 | -11 | 2 | 11 | 27 | 1 | 50 |
| | - 0 | - 6 | 24 | | | | | | | |
| 45 | 4 | 6 | -19 | 4 | 13 | 35 | 9 | 9 | -12 | 8 |
| | 23 | 19 | 13 | 11 | 1 | 18 | 7 | 15 | -23 | 21 |
| | 19 | 8 | -13 | 10 | 28 | 19 | 18 | 29 | 22 | 36 |
| | 23 | - 6 | 14 | - 3 | -25 | 10 | 1 | 15 | - 3 | 16 |
| | -27 | 19 | 23 | 12 | | | | | | |
| 46 | 5 | 35 | -29 | 41 | 38 | 58 | 18 | 40 | -10 | 37 |
| | 34 | 39 | 35 | 32 | - 5 | 4 | 33 | - 6 | -10 | 30 |
| | 12 | 39 | - 0 | 15 | 35 | 11 | 20 | 22 | 32 | 30 |
| | 53 | -27 | 23 | 39 | 26 | 34 | 33 | 37 | 12 | 53 |
| | 5 | 23 | 40 | 25 | 24 | | | | | |
| 47 | 29 | 16 | -21 | 26 | 7 | 39 | 19 | - 9 | -31 | 5 |
| | 43 | 17 | 26 | 12 | -25 | -12 | - 5 | 2 | -13 | 27 |
| | 20 | 30 | 5 | -13 | 30 | -13 | - 9 | 24 | 30 | 42 |
| | 8 | -12 | - 0 | 10 | -13 | - 6 | 11 | 22 | 6 | 49 |
| | -12 | 15 | 31 | 40 | 20 | 33 | | | | |
| 48 | -26 | -14 | 17 | 8 | - 1 | - 6 | 26 | 46 | 53 | 28 |
| | - 3 | 15 | 17 | 40 | 49 | 63 | 46 | 19 | 37 | 23 |
| | 25 | 4 | -20 | 47 | 16 | 34 | 54 | 17 | 8 | -38 |
| | 43 | 24 | 10 | 15 | 50 | 50 | 43 | 13 | 31 | 16 |
| | 36 | 13 | - 2 | -14 | - 4 | 16 | -26 | | | |

Table E5 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 49 | -3 | 21 | 11 | 12 | -10 | -23 | 16 | 15 | -2 | -2 |
| | 13 | -22 | 15 | 18 | 5 | 8 | 1 | 27 | 13 | -6 |
| | -19 | 16 | 10 | 5 | 16 | -0 | -3 | 14 | -1 | -15 |
| | -16 | 14 | 32 | 15 | 10 | -3 | 23 | -5 | -20 | 15 |
| | 5 | -21 | -13 | 17 | -18 | 3 | 5 | 8 | | |
| 50 | -7 | 11 | -29 | 16 | 4 | 17 | -4 | 31 | 8 | 46 |
| | 1 | 46 | 6 | 8 | 14 | 29 | 33 | -8 | -4 | 9 |
| | -22 | 10 | -10 | 36 | 7 | -4 | 43 | 8 | 38 | -19 |
| | 37 | -21 | 36 | 34 | 39 | 32 | 28 | 22 | -1 | 4 |
| | 43 | -22 | 16 | -0 | -12 | 3 | -22 | 34 | 6 | |
| 51 | 8 | -4 | 33 | -2 | -6 | -15 | 14 | 23 | 32 | 3 |
| | -12 | -12 | 11 | 37 | 53 | 37 | 21 | 25 | 28 | -2 |
| | 21 | 12 | 17 | 21 | 8 | 32 | 20 | -3 | -12 | -6 |
| | 15 | 39 | -0 | 6 | 34 | 16 | 4 | 0 | 8 | 3 |
| | 5 | 30 | -6 | -15 | -3 | 5 | -14 | 49 | 16 | -1 |
| 52 | -15 | 4 | -17 | 11 | -10 | 24 | 22 | -2 | -24 | 5 |
| | 34 | 1 | 37 | 20 | -15 | 2 | -2 | 8 | -23 | 1 |
| | -10 | 18 | -24 | -10 | 22 | 8 | -4 | 23 | 11 | 14 |
| | 7 | -10 | 11 | -1 | 1 | -8 | 35 | 18 | -25 | 31 |
| | 2 | 4 | 21 | 12 | 18 | 32 | 15 | 8 | 23 | 6 |
| | -0 | | | | | | | | | |
| 53 | 13 | 24 | 5 | 6 | -2 | -13 | 10 | -0 | 10 | -6 |
| | 15 | -20 | 10 | 13 | 16 | 7 | -14 | 22 | 23 | 8 |
| | 14 | 15 | 6 | -16 | 5 | 15 | -18 | -9 | -8 | -4 |
| | -3 | 32 | 5 | -1 | 2 | -8 | 3 | -10 | -9 | 16 |
| | -28 | -11 | -20 | 12 | 1 | 5 | 9 | 4 | 41 | -14 |
| | 16 | -5 | | | | | | | | |
| 54 | 7 | 20 | -49 | 28 | 65 | 56 | 3 | 43 | -8 | 48 |
| | 19 | 64 | 21 | 19 | -3 | 22 | 46 | -18 | -7 | 50 |
| | 15 | 14 | -4 | 42 | 24 | -4 | 43 | 21 | 52 | -1 |
| | 64 | -29 | 35 | 54 | 23 | 45 | 31 | 46 | 45 | 37 |
| | 11 | 17 | 28 | 24 | 24 | 46 | 23 | 18 | -10 | 16 |
| | -15 | 3 | -7 | | | | | | | |
| 55 | 6 | -2 | 19 | -3 | -30 | -20 | 9 | 2 | -4 | -11 |
| | -10 | -27 | -6 | -1 | 27 | 3 | -7 | 15 | 15 | -8 |
| | 0 | 2 | -11 | 3 | -3 | 13 | 7 | -3 | -16 | -12 |
| | -18 | 34 | -1 | -27 | -2 | -12 | -23 | -9 | -30 | -10 |
| | -2 | 10 | -11 | 1 | -1 | -28 | -12 | 8 | 25 | 10 |
| | 19 | 2 | 16 | -31 | | | | | | |
| 56 | -42 | -2 | 37 | 15 | -31 | -47 | 15 | -11 | 6 | -24 |
| | 8 | -27 | 3 | -4 | -7 | -2 | -21 | 42 | 12 | -23 |
| | -17 | -3 | -7 | -15 | -0 | 16 | -18 | 2 | -13 | -21 |
| | -26 | 28 | -3 | -20 | -7 | -8 | 13 | -30 | -34 | -4 |
| | 2 | -26 | 2 | -5 | -10 | -6 | -24 | 15 | 35 | 3 |
| | 4 | 24 | 5 | -42 | 26 | | | | | |

Table E5 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57 | -13 | -23 | 42 | -16 | -62 | -36 | 10 | -34 | 1 | -39 |
| | - 7 | -51 | - 6 | -14 | 8 | - 9 | -31 | 30 | 1 | -34 |
| | - 1 | - 7 | -15 | -33 | - 9 | 6 | -32 | - 8 | -27 | 13 |
| | -47 | 31 | -32 | -54 | -14 | q -27 | -19 | -34 | -47 | -18 |
| | -13 | - 7 | - 9 | -15 | 1 | -27 | -13 | - 9 | 11 | -21 |
| | 16 | 17 | 4 | -69 | 39 | 44 | | | | |
| 58 | 13 | 14 | 2 | 12 | - 1 | 25 | 15 | 18 | 22 | - 3 |
| | 22 | 18 | 17 | 4 | 25 | 17 | 15 | 2 | 18 | 9 |
| | 33 | 16 | 1 | 20 | 21 | 36 | 31 | 22 | 17 | 18 |
| | 29 | 30 | -14 | 3 | 2 | 20 | 9 | 17 | 11 | 18 |
| | 9 | 23 | 57 | 5 | 26 | 27 | 9 | 28 | -26 | 4 |
| | 31 | 7 | - 4 | 10 | 6 | 0 | 1 | | | |
| 59 | -14 | - 6 | 20 | -14 | 2 | -21 | -12 | 34 | 42 | 24 |
| | -29 | 12 | -12 | 5 | 58 | 39 | 19 | - 5 | 38 | - 0 |
| | 2 | 1 | 3 | 53 | - 3 | 19 | 53 | 13 | - 3 | -20 |
| | 28 | 23 | 1 | 6 | 19 | 32 | - 4 | - 6 | 12 | -26 |
| | 23 | 30 | - 8 | -32 | 2 | -18 | -36 | 45 | -14 | 26 |
| | 36 | -24 | -25 | 3 | 27 | 1 | 0 | 27 | | |
| 60 | -35 | - 9 | 13 | 19 | 9 | 10 | 24 | 38 | 35 | 28 |
| | 10 | 22 | 14 | 27 | 27 | 44 | 31 | 4 | 15 | 17 |
| | 33 | 15 | -11 | 40 | 22 | 34 | 49 | 25 | 19 | 2 |
| | 41 | 8 | 2 | 10 | 20 | 50 | 28 | 8 | 14 | 18 |
| | 22 | 29 | 16 | -12 | 37 | 29 | - 1 | 47 | -17 | 10 |
| | 30 | 11 | -23 | 22 | - 2 | 11 | - 1 | 36 | 50 | |
| 61 | 6 | 27 | -21 | 31 | 34 | 49 | 5 | 34 | 2 | 33 |
| | 42 | 47 | 41 | 16 | 7 | 14 | 29 | 0 | - 6 | 28 |
| | 20 | 37 | 13 | 25 | 35 | 8 | 36 | 18 | 55 | 19 |
| | 48 | -13 | 12 | 45 | 15 | 42 | 29 | 37 | 2 | 46 |
| | 27 | 9 | 39 | 13 | 12 | 40 | 22 | 17 | - 9 | 21 |
| | 3 | 14 | - 3 | 46 | -20 | -10 | -26 | 40 | 0 | 30 |
| 62 | -19 | -18 | 23 | - 1 | -38 | -43 | 32 | -13 | 7 | -33 |
| | - 5 | -48 | - 1 | 12 | -17 | - 4 | -13 | 18 | 14 | - 7 |
| | - 1 | -12 | - 8 | -24 | -15 | 1 | -27 | -10 | -31 | -21 |
| | -42 | 24 | - 7 | -26 | -10 | -27 | 21 | -23 | - 9 | -12 |
| | - 0 | -10 | -15 | - 8 | -24 | -15 | - 9 | 11 | 41 | -23 |
| | 20 | 12 | 25 | -38 | 14 | 34 | 19 | -11 | -16 | -17 |
| | -38 | | | | | | | | | |
| 63 | 34 | 4 | - 9 | 5 | 11 | 27 | 9 | -14 | -32 | - 5 |
| | 1 | - 8 | 8 | -13 | -11 | -30 | - 7 | -13 | -12 | - 4 |
| | -10 | 18 | - 2 | -13 | 28 | - 7 | - 9 | -11 | - 6 | 32 |
| | 4 | -11 | - 4 | 9 | -25 | -13 | -21 | 35 | -11 | 13 |
| | 6 | 14 | 18 | 15 | 9 | 6 | 17 | -29 | -17 | -21 |
| | - 8 | 13 | -16 | 2 | 0 | -23 | 7 | 4 | - 7 | - 9 |
| | 17 | -19 | | | | | | | | |

## Table E5 Continued

| Row | | | | Factor | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 64 | 15 | 10 | 12 | 10 | 3 | 5 | 15 | 15 | 17 | 1 |
| | 19 | 6 | 41 | 24 | 18 | 19 | 2 | 25 | 12 | 4 |
| | 38 | 28 | 15 | 7 | 22 | 16 | 19 | 18 | 11 | 9 |
| | 17 | 29 | -24 | - 3 | -13 | 6 | 9 | 3 | - 3 | 6 |
| | - 7 | 10 | - 5 | 7 | 12 | 14 | 7 | 14 | 6 | - 8 |
| | 25 | 6 | 22 | 1 | 8 | 3 | 9 | 16 | 6 | 15 |
| | 11 | 4 | - 4 | | | | | | | |
| 65 | -10 | - 0 | 8 | 12 | -12 | -18 | 21 | 6 | - 4 | -13 |
| | - 5 | -25 | - 5 | 14 | 6 | 22 | 1 | 39 | 10 | 5 |
| | - 5 | 5 | -30 | 6 | 17 | 17 | 0 | - 3 | -30 | - 7 |
| | - 2 | 26 | 18 | - 9 | 5 | 0 | 11 | - 3 | -10 | 1 |
| | -21 | 0 | - 3 | - 7 | 10 | 3 | -10 | 22 | 34 | - 4 |
| | 15 | 23 | 23 | - 5 | 33 | 38 | 16 | - 7 | 5 | 9 |
| | -24 | 23 | -14 | 2 | | | | | | |
| 66 | -22 | 3 | -14 | 21 | 12 | 19 | 16 | 6 | 0 | 23 |
| | 32 | 15 | 10 | 16 | - 9 | 4 | 11 | 9 | - 7 | 26 |
| | 18 | 2 | - 5 | 2 | 4 | - 1 | 1 | 3 | 18 | 6 |
| | 24 | -13 | 22 | 0 | 19 | 8 | 23 | 16 | 11 | 19 |
| | - 2 | 6 | 21 | 3 | 20 | 30 | 33 | 12 | 9 | - 2 |
| | - 0 | 27 | 7 | 24 | - 4 | 10 | -16 | 3 | -18 | 14 |
| | 7 | 8 | - 5 | 1 | 16 | | | | | |
| 67 | -13 | - 4 | -18 | 3 | 4 | 21 | 5 | 29 | 21 | 31 |
| | 12 | 18 | 3 | 5 | 22 | 20 | 27 | 18 | -17 | 18 |
| | 26 | 7 | -26 | 28 | 4 | 11 | 34 | 20 | 26 | -10 |
| | 31 | - 7 | 7 | 2 | 25 | 47 | 16 | 0 | 5 | 8 |
| | 10 | 16 | 10 | - 1 | 18 | 11 | - 3 | 31 | - 3 | 26 |
| | 7 | 0 | - 5 | 21 | 5 | -10 | 1 | 15 | 18 | 31 |
| | 19 | -20 | -16 | 11 | - 3 | 11 | | | | |
| 68 | 3 | -18 | 23 | 9 | -14 | -30 | 14 | -18 | 3 | -28 |
| | 6 | -31 | - 9 | - 4 | -14 | -10 | - 1 | 16 | 9 | - 7 |
| | - 2 | -16 | 5 | -21 | -17 | - 2 | -24 | -21 | -22 | -12 |
| | -23 | 27 | -12 | -11 | 9 | -26 | - 9 | -19 | 6 | - 8 |
| | 9 | -17 | - 8 | -17 | -24 | -22 | -14 | 8 | 17 | - 6 |
| | 23 | 11 | 3 | -24 | 13 | 30 | 17 | -11 | - 6 | - 9 |
| | -14 | 35 | - 2 | - 4 | 23 | 6 | -16 | | | |
| 69 | - 0 | 5 | 7 | 24 | 17 | 21 | 14 | 41 | 33 | 31 |
| | 13 | 23 | 10 | 35 | 40 | 42 | 46 | 28 | 9 | 26 |
| | 21 | 25 | 14 | 42 | 25 | 27 | 53 | 11 | 32 | - 5 |
| | 44 | 4 | 20 | 26 | 35 | 74 | 30 | 22 | 18 | 31 |
| | 17 | 16 | 19 | 7 | 12 | 34 | 1 | 43 | 3 | 18 |
| | 35 | -14 | 8 | 33 | - 7 | - 4 | -17 | 31 | 21 | 42 |
| | 46 | -24 | -13 | 12 | 6 | 11 | 39 | -17 | | |

Table E5 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 | -17 | 2 | 23 | 8 | 9 | -16 | 3 | 38 | 41 | 31 |
| | - 8 | 19 | 1 | 13 | 42 | 39 | 23 | 11 | 31 | - 2 |
| | - 9 | 13 | 1 | 39 | 12 | 32 | 33 | 13 | 11 | -22 |
| | 38 | 22 | 16 | 31 | 29 | 44 | 21 | - 2 | 3 | - 2 |
| | 40 | 6 | 9 | -13 | -10 | - 0 | -26 | 30 | 11 | 41 |
| | 43 | - 9 | - 6 | 4 | 14 | 20 | - 3 | 26 | 63 | 48 |
| | 24 | -10 | - 9 | 1 | 6 | -16 | 13 | 6 | 36 | |
| 71 | - 1 | -12 | 12 | 33 | 3 | 12 | 33 | 14 | 24 | 7 |
| | 30 | - 5 | 27 | 32 | 11 | 21 | 22 | 33 | - 6 | 19 |
| | 32 | 13 | 2 | - 1 | 22 | 18 | 18 | 17 | 18 | 12 |
| | 3 | 20 | - 2 | 8 | 12 | 23 | 20 | 7 | 3 | 33 |
| | 11 | 11 | 20 | 11 | 13 | 18 | 16 | 31 | 4 | 4 |
| | 23 | 13 | 8 | 4 | - 0 | 22 | - 4 | 23 | - 3 | 29 |
| | 25 | 16 | -16 | 16 | 18 | 18 | 19 | 20 | 41 | 6 |
| 72 | -27 | - 6 | 46 | -23 | -41 | -49 | 8 | -13 | 33 | -26 |
| | -19 | -44 | - 6 | 7 | 24 | 16 | -33 | 19 | 31 | -26 |
| | -10 | -13 | 4 | - 8 | -13 | 30 | -16 | 1 | -47 | -23 |
| | -24 | 38 | -18 | -23 | -11 | -17 | -10 | -32 | -31 | -32 |
| | - 8 | 3 | -39 | -20 | - 7 | -23 | -20 | 18 | 21 | -20 |
| | 24 | 8 | 21 | -49 | 16 | 30 | 31 | - 8 | 16 | 9 |
| | -30 | 33 | -19 | 4 | 17 | - 1 | -13 | 19 | -24 | 16 |
| | - 5 | | | | | | | | | |
| 73 | 3 | - 2 | -11 | 12 | 26 | 26 | 16 | 29 | 12 | 6 |
| | -16 | 14 | 3 | 19 | 8 | 14 | 36 | -26 | 2 | 20 |
| | 37 | - 6 | 7 | 13 | - 2 | 6 | 21 | - 7 | - 1 | 9 |
| | 28 | - 7 | - 1 | 13 | 23 | 18 | 9 | 29 | 31 | 18 |
| | 7 | 34 | 5 | 4 | 11 | 23 | 8 | 20 | -21 | -10 |
| | 10 | -21 | - 0 | 40 | - 8 | -44 | -41 | 12 | 2 | 18 |
| | 9 | - 5 | 2 | - 0 | - 7 | 13 | 6 | -12 | 17 | -16 |
| | 19 | -22 | | | | | | | | |
| 74 | -30 | 8 | 17 | 9 | 13 | - 1 | - 6 | 32 | 43 | 42 |
| | -10 | 37 | 4 | 27 | 31 | 44 | 30 | 1 | 25 | 11 |
| | - 2 | 16 | 17 | 63 | 8 | 27 | 60 | 21 | 23 | -11 |
| | 34 | 8 | 26 | 34 | 42 | 61 | 33 | 12 | 13 | 6 |
| | 33 | 17 | 6 | -10 | 4 | 20 | -22 | 51 | 2 | 34 |
| | 33 | - 3 | -11 | 23 | 1 | 9 | -21 | 24 | 61 | 30 |
| | 33 | -18 | -21 | 9 | 3 | 10 | 24 | -17 | 33 | 62 |
| | 17 | - 8 | 9 | | | | | | | |
| 75 | 12 | 17 | -21 | 29 | 26 | 36 | 13 | 44 | 19 | 46 |
| | 17 | 37 | 12 | 34 | 37 | 37 | 30 | 22 | - 1 | 29 |
| | 14 | 32 | 1 | 50 | 34 | 13 | 50 | 9 | 34 | 4 |
| | 59 | - 9 | 42 | 46 | 41 | 60 | 32 | 40 | 13 | 33 |
| | 18 | 17 | 21 | 9 | 21 | 44 | 11 | 38 | 10 | 31 |
| | 23 | 1 | 17 | 48 | - 8 | -18 | -30 | 13 | 17 | 28 |
| | 37 | -33 | - 8 | 13 | 18 | 21 | 40 | -18 | 69 | 24 |
| | 38 | -20 | 21 | 52 | | | | | | |

Table E5 Continued

Factor

| Row | | | | | | | | | | |
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| 76 | -16 | 3 | 34 | 5 | -12 | -24 | 6 | 6 | 40 | 14 |
| | 4 | 9 | 6 | 21 | 36 | 49 | -3 | 26 | 45 | 6 |
| | 8 | 2 | 4 | 54 | 11 | 47 | 50 | 24 | 4 | -24 |
| | 20 | 35 | -4 | 1 | 11 | 39 | 16 | -7 | 16 | -15 |
| | 18 | 4 | 3 | -4 | -2 | -13 | -23 | 40 | 2 | 25 |
| | 15 | -6 | -14 | 7 | 16 | 24 | 4 | 22 | 55 | 33 |
| | 10 | -16 | -15 | 8 | 12 | -15 | 12 | 5 | 27 | 61 |
| | 2 | 14 | -17 | 49 | 14 | | | | | |
| 77 | -26 | -2 | 39 | 7 | -14 | -18 | 18 | 28 | 53 | 16 |
| | 7 | 12 | 12 | 22 | 42 | 47 | 12 | 17 | 42 | 7 |
| | 2 | 14 | 7 | 51 | 12 | 43 | 47 | 23 | 11 | -28 |
| | 25 | 29 | 7 | 15 | 24 | 43 | 36 | -8 | 13 | 4 |
| | 47 | -8 | 13 | -1 | -11 | 2 | -16 | 55 | 14 | 33 |
| | 21 | -7 | -9 | -1 | 4 | 29 | -7 | 28 | 43 | 37 |
| | 15 | 2 | -22 | 4 | 3 | -3 | 15 | 6 | 37 | 62 |
| | 17 | 22 | -5 | 54 | 22 | 67 | | | | |
| 78 | 28 | 25 | -39 | 32 | 34 | 59 | 9 | 15 | -35 | 13 |
| | 31 | 33 | 24 | 8 | -20 | -17 | 31 | -15 | -32 | 12 |
| | -2 | 26 | 12 | 6 | 35 | -18 | 16 | 8 | 36 | 33 |
| | 27 | -33 | 21 | 33 | 2 | 9 | 12 | 46 | 12 | 40 |
| | 12 | 2 | 49 | 25 | 19 | 41 | 28 | -18 | 1 | 6 |
| | -9 | 19 | -18 | 43 | -11 | -20 | -33 | 18 | -19 | -2 |
| | 34 | -12 | 27 | -3 | -9 | 9 | -5 | -9 | 22 | -9 |
| | 18 | -61 | 19 | 2 | 22 | -21 | -17 | | | |
| 79 | 17 | 22 | -13 | 21 | 18 | 42 | 10 | -2 | -3 | 12 |
| | 37 | 10 | 35 | 14 | 1 | -2 | 2 | 8 | -22 | 6 |
| | 18 | 34 | 2 | -7 | 30 | 12 | -1 | 18 | 11 | 63 |
| | 24 | -6 | -1 | -3 | -7 | 1 | 4 | 17 | -3 | 27 |
| | -18 | 14 | 29 | 17 | 39 | 40 | 28 | -15 | -9 | -12 |
| | 8 | 16 | 17 | 8 | -14 | -13 | 1 | 32 | -19 | 15 |
| | 17 | -11 | 7 | 22 | 3 | 15 | 16 | -21 | 14 | -12 |
| | 32 | -13 | 3 | 1 | 23 | -24 | -21 | 32 | | |
| 80 | 28 | 23 | -42 | 30 | 41 | 59 | 1 | 12 | -38 | 18 |
| | 30 | 45 | 28 | 12 | -28 | -17 | 25 | -22 | -40 | 24 |
| | 9 | 22 | 6 | -3 | 22 | -18 | 11 | 18 | 49 | 40 |
| | 28 | -38 | 9 | 19 | 14 | 12 | 9 | 39 | 18 | 42 |
| | 2 | 9 | 44 | 25 | 17 | 45 | 37 | -28 | -14 | 0 |
| | -23 | 12 | -18 | 52 | -15 | -33 | -24 | 7 | -32 | -5 |
| | 34 | -33 | 21 | -3 | -15 | 14 | 3 | -17 | 15 | -27 |
| | 5 | -75 | 29 | -7 | 18 | -21 | -33 | 69 | 29 | |
| 81 | 20 | 18 | 4 | 27 | -6 | 20 | 20 | -6 | -15 | -4 |
| | 39 | -6 | 31 | 19 | 10 | 15 | -3 | 39 | -6 | 12 |
| | 12 | 30 | 6 | 7 | 42 | 26 | -1 | 15 | 16 | 13 |
| | 7 | 12 | 14 | 8 | -9 | 10 | 21 | 29 | -25 | 37 |
| | -6 | 1 | 44 | 24 | 29 | 28 | 21 | 6 | 23 | -8 |
| | 22 | 33 | 10 | 11 | -1 | 15 | 11 | 36 | -13 | 13 |
| | 22 | -7 | 14 | 21 | 15 | 16 | 5 | -7 | 30 | 4 |
| | 17 | -4 | -17 | 1 | 24 | 5 | 9 | 24 | 27 | 11 |

Table E5 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 82 | 8 | - 5 | 14 | 15 | 7 | -11 | 14 | 5 | 41 | -10 |
| | 8 | 5 | 0 | 10 | 14 | 14 | 17 | 13 | 28 | 14 |
| | 51 | 1 | 8 | 12 | - 6 | 19 | 15 | 4 | 5 | 1 |
| | 14 | 24 | -19 | - 1 | 2 | 27 | 16 | 0 | 33 | 16 |
| | - 1 | 29 | 9 | - 1 | 11 | 7 | 6 | 29 | -17 | -14 |
| | 24 | -15 | 24 | 12 | - 4 | - 5 | - 1 | 36 | 15 | 31 |
| | 9 | 2 | -13 | 41 | 6 | 7 | 22 | 5 | 34 | 4 |
| | 33 | - 9 | 29 | 21 | 28 | 10 | 7 | - 9 | 20 | 1 |
| | 9 | | | | | | | | | |
| 83 | 11 | 10 | 37 | 16 | - 7 | -22 | 5 | -15 | 21 | - 3 |
| | - 2 | -10 | 6 | -11 | 19 | - 2 | -18 | - 2 | 37 | - 9 |
| | - 8 | 20 | 41 | - 5 | 11 | 14 | - 1 | 2 | - 3 | 2 |
| | - 0 | 32 | - 8 | 8 | - 0 | - 6 | - 6 | - 5 | -14 | - 3 |
| | 14 | - 6 | 3 | - 9 | -13 | -11 | 3 | 4 | 5 | 7 |
| | 16 | - 7 | 2 | -25 | 4 | 24 | 7 | 15 | 26 | 8 |
| | 14 | -11 | 19 | 8 | -14 | - 5 | -27 | 22 | - 4 | 40 |
| | - 0 | 31 | -31 | 18 | - 4 | 35 | 39 | -12 | -12 | -28 |
| | 11 | - 3 | | | | | | | | |
| 84 | 20 | 4 | 0 | 15 | - 4 | 1 | 5 | -14 | -34 | -22 |
| | 14 | -22 | 20 | -15 | -36 | -34 | -13 | 10 | -16 | 1 |
| | - 7 | 14 | 13 | -30 | 4 | -27 | -23 | -14 | - 0 | 20 |
| | -27 | 2 | - 2 | 3 | -36 | -34 | - 3 | -14 | -26 | 3 |
| | 1 | -18 | - 1 | 19 | -13 | - 1 | 26 | -40 | 29 | -22 |
| | - 7 | 18 | 12 | -16 | 1 | 15 | 9 | -11 | -31 | -30 |
| | 4 | 34 | 25 | 21 | - 7 | 0 | -32 | 22 | -24 | -18 |
| | 7 | - 4 | -23 | -29 | -27 | -24 | -20 | 14 | 2 | 3 |
| | 6 | -13 | 12 | | | | | | | |
| 85 | - 8 | 7 | 18 | 22 | 5 | 13 | 22 | 31 | 23 | 15 |
| | 8 | 10 | 14 | 30 | 38 | 39 | 34 | 20 | 24 | 18 |
| | 36 | 22 | 1 | 44 | 31 | 25 | 44 | 4 | 5 | - 5 |
| | 39 | 14 | 8 | 13 | 23 | 43 | 29 | 31 | 28 | 22 |
| | 34 | 11 | 21 | 1 | 6 | 12 | - 0 | 47 | - 5 | 14 |
| | 33 | -11 | - 9 | 26 | 6 | - 0 | -25 | 27 | 37 | 52 |
| | 28 | - 6 | -13 | 12 | 16 | 20 | 20 | 2 | 48 | 32 |
| | 30 | - 5 | 33 | 47 | 43 | 23 | 35 | 15 | 5 | - 4 |
| | 25 | 24 | 6 | -23 | | | | | | |
| 86 | -13 | 11 | -26 | 35 | 26 | 32 | 20 | 38 | 0 | 33 |
| | 12 | 27 | 13 | 30 | 2 | 9 | 58 | 2 | - 8 | 30 |
| | 14 | 11 | -14 | 16 | 31 | - 1 | 32 | 8 | 24 | 5 |
| | 45 | -19 | 41 | 25 | 31 | 37 | 41 | 37 | 24 | 43 |
| | 20 | 8 | 18 | 9 | 14 | 49 | 18 | 37 | 17 | 19 |
| | 15 | 23 | 10 | 47 | -13 | - 1 | -31 | 8 | - 4 | 23 |
| | 25 | 4 | 1 | - 1 | 20 | 32 | 18 | - 3 | 39 | 4 |
| | 30 | -33 | 32 | 28 | 49 | -12 | 2 | 32 | 17 | 30 |
| | 13 | 26 | -22 | 4 | 34 | | | | | |

## Table E5 Continued

### Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 87 | 9 | 12 | 6 | 10 | 9 | -11 | 5 | 22 | 34 | 19 |
| | -7 | 8 | 12 | 18 | 37 | 31 | 20 | 15 | 28 | 6 |
| | -4 | 16 | 14 | 26 | 4 | 18 | 19 | 3 | 12 | -21 |
| | 26 | 23 | 29 | 34 | 36 | 19 | 11 | 11 | -6 | 7 |
| | 4 | 8 | 2 | -5 | -4 | 3 | -12 | 35 | 32 | 32 |
| | 47 | -5 | 33 | 9 | 20 | 6 | -2 | 12 | 24 | 1 |
| | 9 | 7 | -15 | 9 | 28 | 8 | 14 | 19 | 31 | 39 |
| | 14 | 14 | 0 | 35 | 45 | 21 | 31 | -6 | -1 | -17 |
| | 8 | 14 | 23 | -17 | 11 | 22 | | | | |
| 88 | 4 | -1 | -7 | 14 | 22 | 29 | 8 | 27 | 23 | 24 |
| | 9 | 36 | 4 | 20 | 22 | 19 | 33 | -14 | 8 | 28 |
| | 51 | 4 | 4 | 22 | 3 | 6 | 36 | 15 | 28 | 4 |
| | 39 | -4 | -6 | 3 | 24 | 43 | 19 | 26 | 34 | 19 |
| | 5 | 46 | 18 | 1 | 22 | 26 | 8 | 34 | -37 | 4 |
| | 19 | -10 | -7 | 35 | -5 | -26 | -26 | 42 | 25 | 40 |
| | 27 | -18 | -14 | 27 | -9 | 17 | -29 | -27 | 40 | 2 |
| | 28 | -33 | 44 | 36 | 34 | 9 | 2 | 15 | 12 | 29 |
| | 4 | 61 | -16 | -34 | 35 | 29 | 1 | | | |
| 89 | -15 | -21 | 58 | -24 | -47 | -50 | 13 | -20 | 36 | -36 |
| | 1 | -40 | -5 | 1 | 22 | 18 | -27 | 28 | 30 | -31 |
| | -6 | -10 | 4 | -11 | -5 | 36 | -5 | -1 | -35 | -14 |
| | -28 | 46 | -36 | -31 | -12 | -13 | -5 | -35 | -23 | -29 |
| | 7 | -19 | -19 | -25 | -10 | -32 | -27 | 16 | 9 | -3 |
| | 22 | 10 | 10 | -63 | 15 | 44 | 43 | 13 | 17 | 8 |
| | -20 | 23 | -18 | 8 | 13 | -15 | -15 | 30 | -8 | 27 |
| | 9 | 63 | -45 | -1 | -23 | 29 | 38 | -44 | -3 | -58 |
| | 6 | 1 | 44 | 6 | -5 | -35 | 5 | -28 | | |
| 90 | -10 | -10 | 15 | -1 | -30 | -20 | 19 | -20 | -1 | -11 |
| | -7 | -24 | -3 | -19 | -13 | -10 | -15 | 13 | -6 | -7 |
| | -3 | 2 | -11 | -36 | 0 | -12 | -22 | -10 | -4 | -9 |
| | -34 | 9 | -15 | -31 | -11 | -24 | -12 | -6 | -14 | -9 |
| | -18 | -23 | -13 | 8 | -10 | -25 | -5 | -6 | 17 | -6 |
| | -9 | 18 | 12 | -23 | 23 | 21 | 28 | -20 | -15 | -7 |
| | -24 | 26 | 6 | -14 | 22 | 14 | -7 | 20 | -22 | -17 |
| | -1 | 25 | -15 | -31 | -23 | -2 | -10 | -23 | -11 | -16 |
| | -11 | -13 | 6 | 10 | -12 | -10 | -4 | -22 | 20 | |
| 91 | 12 | 23 | -3 | 34 | 21 | 32 | 25 | 42 | 15 | 23 |
| | 35 | 30 | 35 | 33 | 29 | 35 | 33 | 16 | 12 | 26 |
| | 40 | 44 | 1 | 38 | 38 | 34 | 52 | 22 | 34 | 6 |
| | 48 | 9 | 9 | 33 | 20 | 53 | 44 | 30 | 15 | 43 |
| | 29 | 16 | 37 | 21 | 20 | 43 | 15 | 41 | 3 | 14 |
| | 30 | 15 | 17 | 34 | -4 | -8 | -25 | 54 | 13 | 40 |
| | 54 | -14 | -2 | 36 | -3 | 1 | 29 | -16 | 57 | 27 |
| | 35 | -22 | 29 | 44 | 54 | 25 | 34 | 25 | 19 | 18 |
| | 36 | 46 | 6 | -6 | 50 | 39 | 16 | 52 | -10 | -31 |

## Table E5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 92 | 15 | 16 | - 6 | 22 | 13 | 17 | 16 | 19 | - 5 | 23 |
| | 17 | 29 | 26 | 20 | 6 | 22 | 8 | 14 | 8 | 17 |
| | - 8 | 39 | 7 | 38 | 32 | 7 | 33 | 21 | 28 | 8 |
| | 33 | - 9 | 21 | 34 | 12 | 23 | 31 | 27 | 4 | 25 |
| | 17 | - 3 | 26 | 33 | 2 | 27 | 16 | 9 | 13 | 22 |
| | 5 | 12 | - 7 | 32 | -14 | - 2 | -22 | 14 | 11 | 12 |
| | 24 | -17 | 11 | 0 | 11 | - 0 | - 4 | -12 | 37 | 30 |
| | 10 | -19 | - 8 | 35 | 39 | 39 | 42 | 27 | 11 | 15 |
| | 29 | - 8 | 14 | 0 | 17 | 13 | 20 | - 1 | - 9 | - 6 |
| | 26 | | | | | | | | | |
| 93 | -14 | -12 | 12 | - 0 | 3 | 18 | 18 | 18 | 27 | 10 |
| | 3 | 9 | - 0 | 10 | 10 | 18 | 20 | 12 | 1 | 17 |
| | 30 | 3 | 1 | 8 | 3 | 18 | 25 | 12 | 12 | 16 |
| | 20 | 16 | 1 | - 9 | - 4 | 36 | 5 | 6 | 6 | 4 |
| | -12 | 26 | 10 | - 6 | 54 | 20 | 3 | 15 | -26 | -10 |
| | 20 | - 2 | - 8 | 14 | 5 | - 2 | 2 | 31 | 23 | 61 |
| | 21 | -14 | 1 | 16 | 8 | 12 | 28 | -12 | 39 | 12 |
| | 35 | 7 | 21 | 16 | 22 | 6 | 12 | 5 | 23 | - 4 |
| | 7 | 24 | - 1 | -17 | 25 | 12 | 4 | 32 | 2 | 4 |
| | 22 | - 1 | | | | | | | | |
| 94 | 29 | 21 | -16 | 31 | 4 | 43 | 30 | - 1 | -22 | - 3 |
| | 34 | 8 | 31 | 20 | -25 | -15 | 8 | 7 | -28 | 21 |
| | 38 | 25 | 1 | -23 | 21 | - 3 | -12 | 7 | 15 | 51 |
| | 10 | -15 | - 9 | 1 | - 7 | - 1 | 19 | 27 | 10 | 40 |
| | - 8 | 10 | 32 | 28 | 21 | 46 | 35 | -17 | - 7 | -14 |
| | - 7 | 13 | 19 | 13 | -14 | - 9 | - 7 | 11 | -46 | - 2 |
| | 17 | 7 | 2 | 28 | 3 | 15 | 2 | -11 | 6 | -40 |
| | 39 | -31 | 32 | -20 | 13 | -40 | -30 | 35 | 47 | 46 |
| | 16 | 26 | -31 | 20 | 3 | 30 | -20 | 31 | -27 | - 9 |
| | 26 | - 0 | 12 | | | | | | | |
| 95 | -30 | -15 | 25 | -13 | -21 | -32 | - 3 | 0 | 13 | -12 |
| | -29 | -25 | - 8 | 1 | 20 | 20 | 0 | 28 | 18 | -23 |
| | - 8 | -12 | -16 | - 0 | - 1 | 5 | - 6 | - 5 | -23 | -25 |
| | -12 | 28 | - 1 | -15 | 7 | 6 | -10 | - 8 | -18 | -24 |
| | - 7 | - 3 | -26 | -21 | - 4 | -26 | -35 | 29 | 11 | - 2 |
| | 16 | - 8 | - 5 | -19 | 25 | 32 | 36 | -19 | 27 | 11 |
| | -16 | 10 | - 2 | - 2 | 34 | -17 | 1 | 17 | - 5 | 21 |
| | - 7 | 28 | -17 | 1 | -13 | 18 | 7 | -36 | -31 | -33 |
| | - 3 | -13 | 4 | -21 | 9 | - 5 | 18 | -19 | 12 | 23 |
| | -22 | -21 | 10 | -32 | | | | | | |
| 96 | 18 | 30 | -45 | 31 | 34 | 33 | -25 | 17 | -16 | 36 |
| | 12 | 40 | 4 | -15 | -12 | -19 | 20 | -14 | -18 | 17 |
| | - 9 | 16 | 10 | 0 | -10 | -32 | 4 | 6 | 43 | 7 |
| | 31 | -38 | 45 | 38 | 15 | 19 | 5 | 29 | 0 | 10 |
| | 1 | - 2 | 35 | 1 | - 2 | 31 | 1 | - 5 | - 3 | 34 |
| | -10 | - 8 | - 2 | 32 | - 9 | - 2 | -28 | 14 | 5 | - 9 |
| | 32 | -22 | 2 | -20 | - 9 | 18 | 15 | -13 | 20 | 6 |
| | 5 | -42 | 1 | 23 | 30 | - 9 | - 8 | 40 | 8 | 37 |
| | - 0 | - 5 | 3 | - 4 | 3 | 23 | 26 | 22 | -42 | -14 |
| | 13 | 18 | - 4 | 16 | -19 | | | | | |

### Table E5 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 97 | -33 | -19 | 15 | -2 | -18 | -29 | 2 | -7 | 18 | -10 |
| | -16 | -10 | -21 | 3 | -5 | 7 | 7 | 3 | 22 | 1 |
| | -11 | -26 | -8 | -3 | -18 | -9 | -3 | -10 | -13 | -28 |
| | -5 | 6 | 3 | -12 | 8 | -4 | 5 | -10 | 4 | -20 |
| | 17 | -10 | -6 | -16 | -7 | -16 | -21 | 25 | 2 | 9 |
| | -1 | -2 | -10 | -8 | 6 | 27 | 3 | -16 | 17 | 7 |
| | -27 | 31 | -24 | -9 | 16 | 22 | -9 | 39 | -18 | 10 |
| | 4 | 30 | -10 | 4 | -14 | 9 | 13 | -24 | -26 | -33 |
| | -16 | -0 | 11 | -3 | 7 | 1 | 7 | -12 | 25 | 17 |
| | -31 | -23 | 1 | -23 | 34 | -15 | | | | |
| 98 | 2 | -3 | 45 | -3 | -44 | -33 | 24 | -26 | 21 | -30 |
| | -3 | -31 | 11 | 7 | -1 | 6 | -31 | 22 | 41 | 1 |
| | 28 | -6 | -8 | -12 | -7 | 28 | -11 | 13 | -26 | -2 |
| | -17 | 41 | -28 | -30 | -22 | -14 | 0 | -11 | 1 | -14 |
| | -4 | 2 | 3 | 6 | 2 | -17 | 2 | 10 | -5 | -27 |
| | 10 | -1 | 7 | -30 | 15 | 18 | 30 | 15 | 11 | 11 |
| | -19 | 27 | 8 | 14 | 6 | -3 | -13 | 15 | -25 | 8 |
| | 0 | 42 | -7 | -13 | -36 | 30 | 23 | -37 | -11 | -31 |
| | 6 | 16 | 27 | 4 | 2 | -24 | -7 | -8 | 37 | 28 |
| | -9 | 4 | 10 | -2 | 26 | -32 | 29 | | | |
| 99 | -8 | 7 | 7 | 17 | 13 | 13 | 26 | 28 | 31 | 2 |
| | 16 | 12 | 17 | 22 | 8 | 29 | 20 | 15 | 14 | 20 |
| | 55 | 23 | -4 | 17 | 25 | 28 | 28 | 18 | 16 | 7 |
| | 21 | 21 | -18 | 2 | 3 | 32 | 24 | 4 | 30 | 30 |
| | 0 | 23 | 6 | 12 | 26 | 33 | 13 | 36 | -11 | -5 |
| | 21 | -2 | 18 | 19 | -9 | -5 | -4 | 35 | 5 | 50 |
| | 32 | -6 | -19 | 43 | 5 | 4 | 27 | -12 | 36 | 9 |
| | 34 | -7 | 31 | 17 | 25 | 10 | 8 | -7 | 19 | 9 |
| | 9 | 58 | -6 | -9 | 29 | 23 | -7 | 54 | -3 | -3 |
| | 51 | -5 | 39 | 34 | -7 | -14 | -11 | 7 | | |
| 100 | -5 | 0 | -43 | 12 | 16 | 34 | -11 | 11 | 1 | 26 |
| | 5 | 34 | -17 | -11 | -15 | -12 | 42 | -21 | -26 | 18 |
| | 12 | -13 | 1 | -4 | -15 | -28 | 11 | -2 | 30 | 12 |
| | 23 | -27 | 21 | 1 | 27 | 28 | 13 | 18 | 30 | 14 |
| | 5 | 12 | 21 | 3 | 11 | 20 | 17 | 1 | -25 | 15 |
| | -13 | -3 | 2 | 32 | -17 | -35 | -25 | 5 | -13 | -3 |
| | 9 | -8 | -17 | -6 | -16 | 27 | 31 | -10 | 17 | -23 |
| | 14 | -38 | 33 | 10 | 31 | -27 | -25 | 18 | 15 | 35 |
| | -21 | 30 | -30 | -17 | 4 | 37 | 0 | 44 | -44 | -7 |
| | 16 | -20 | 9 | 25 | -22 | 34 | 5 | -29 | 21 | |

## Table E6

Correlation Matrix by Rows Below Diagonal for JCES Item Percents 3, 6, 9, ---, 300

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 11 | | | | | | | | | |
| 3 | 5 | 28 | | | | | | | | |
| 4 | 23 | 5 | 1 | | | | | | | |
| 5 | 43 | 12 | 9 | 40 | | | | | | |
| 6 | 25 | 32 | 37 | 15 | 30 | | | | | |
| 7 | -16 | 7 | 6 | - 7 | - 7 | - 8 | | | | |
| 8 | 8 | 31 | 27 | 6 | 22 | 29 | 32 | | | |
| 9 | 8 | 40 | 41 | 3 | 27 | 45 | 14 | 68 | | |
| 10 | 12 | -32 | -36 | 1 | -11 | -32 | -27 | -45 | -42 | |
| 11 | 12 | 7 | 45 | 28 | 17 | 24 | -15 | - 1 | 11 | -28 |
| 12 | 11 | -11 | 10 | 19 | 37 | 26 | 6 | 7 | 8 | -14 |
| | 16 | | | | | | | | | |
| 13 | 36 | 7 | 29 | - 1 | 29 | 34 | -20 | 13 | 17 | - 1 |
| | 23 | 23 | | | | | | | | |
| 14 | 12 | 26 | 8 | 13 | 13 | 15 | 3 | 34 | 23 | -14 |
| | -11 | - 6 | - 5 | | | | | | | |
| 15 | 34 | 43 | 54 | 11 | 34 | 47 | -17 | 33 | 39 | -33 |
| | 40 | 8 | 37 | 40 | | | | | | |
| 16 | - 1 | 28 | - 4 | 6 | 20 | 9 | 53 | 59 | 35 | -31 |
| | -18 | 9 | - 4 | 35 | 2 | | | | | |
| 17 | 7 | -13 | 20 | 16 | 17 | 37 | 11 | 2 | 13 | -18 |
| | 32 | 25 | 18 | -22 | 13 | - 6 | | | | |
| 18 | 43 | 13 | 29 | - 3 | 29 | 36 | 7 | 37 | 28 | -17 |
| | 3 | 14 | 39 | 11 | 32 | 38 | 3 | | | |
| 19 | 17 | 31 | 2 | 17 | 7 | - 8 | 8 | 2 | -18 | 1 |
| | - 6 | - 4 | -12 | 36 | 19 | 9 | -22 | 3 | | |
| 20 | 21 | 30 | 21 | 2 | 30 | 38 | 32 | 55 | 44 | -34 |
| | - 8 | 18 | 14 | 36 | 28 | 60 | - 1 | 49 | - 2 | |
| 21 | 32 | 22 | 26 | 47 | 65 | 23 | - 6 | 15 | 19 | -19 |
| | 41 | 24 | 16 | 21 | 42 | 2 | 6 | 16 | 22 | 22 |
| 22 | 28 | -23 | - 1 | 2 | - 1 | 20 | -13 | - 1 | - 2 | 8 |
| | 12 | 14 | 33 | - 7 | 7 | -11 | 23 | 3 | -12 | - 0 |
| | -12 | | | | | | | | | |
| 23 | 3 | -34 | 5 | 0 | 3 | 1 | 26 | 10 | 10 | -11 |
| | 0 | 22 | 18 | - 9 | -11 | 21 | 36 | 18 | -23 | 10 |
| | - 4 | 19 | | | | | | | | |
| 24 | - 5 | 15 | 11 | 8 | 21 | - 7 | 50 | 37 | 17 | -32 |
| | - 4 | 14 | -12 | - 4 | -14 | 41 | - 1 | 21 | 18 | 22 |
| | 15 | -29 | 14 | | | | | | | |
| 25 | 30 | -24 | 4 | - 6 | - 2 | - 8 | -19 | -13 | -18 | 29 |
| | 4 | 9 | 30 | -24 | - 3 | -26 | - 8 | 15 | -23 | - 6 |
| | - 4 | 9 | - 5 | -16 | | | | | | |

## Table E6 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 58 | 21 | 19 | 21 | 48 | 41 | 0 | 18 | 10 | 10 |
| | 26 | 34 | 44 | 20 | 47 | 20 | 18 | 34 | 3 | 32 |
| | 34 | 22 | 8 | - 0 | 19 | | | | | |
| 27 | 17 | - 8 | 13 | 4 | 19 | 40 | 2 | 12 | 10 | - 6 |
| | 14 | 8 | 29 | 6 | 33 | 2 | 36 | 28 | - 3 | 21 |
| | 10 | 17 | 24 | -11 | 2 | 24 | | | | |
| 28 | 0 | 5 | -27 | - 5 | - 1 | -29 | 16 | - 6 | -23 | 23 |
| | -46 | - 6 | -38 | 9 | -35 | 17 | -41 | - 8 | 19 | 18 |
| | - 1 | - 9 | -24 | 10 | - 1 | - 9 | -36 | | | |
| 29 | 61 | 16 | 41 | 13 | 45 | 52 | -15 | 12 | 23 | 2 |
| | 37 | 26 | 73 | 0 | 53 | - 3 | 34 | 48 | - 9 | 26 |
| | 35 | 32 | 13 | -10 | 28 | 71 | 39 | -32 | | |
| 30 | 22 | -27 | 7 | -11 | 3 | 9 | - 8 | -17 | - 6 | 24 |
| | 1 | 1 | 19 | -34 | - 2 | -16 | 11 | 13 | -25 | -15 |
| | -10 | 22 | 5 | -21 | 28 | 12 | - 1 | - 7 | 20 | |
| 31 | -15 | 34 | 13 | 8 | 17 | 11 | 24 | 50 | 34 | -36 |
| | -14 | 7 | -15 | 34 | 8 | 58 | -18 | 18 | 23 | 45 |
| | 7 | -23 | - 6 | 27 | -24 | - 5 | - 4 | 23 | -22 | -24 |
| 32 | 4 | 47 | 20 | 7 | 30 | 16 | 31 | 58 | 50 | -39 |
| | - 9 | 12 | 4 | 37 | 29 | 45 | -18 | 18 | 7 | 49 |
| | 26 | -13 | 1 | 37 | -21 | 20 | - 5 | 18 | 7 | -32 |
| | 55 | | | | | | | | | |
| 33 | - 6 | -15 | -34 | 9 | -10 | -19 | 35 | 17 | - 8 | 2 |
| | -32 | 7 | -24 | 5 | -48 | 38 | -25 | 2 | 10 | 18 |
| | -18 | -10 | 7 | 26 | 5 | - 9 | -17 | 32 | -26 | -20 |
| | 29 | 17 | | | | | | | | |
| 34 | 10 | 51 | 50 | 10 | 25 | 44 | 9 | 34 | 48 | -40 |
| | 11 | 1 | 16 | 21 | 51 | 22 | 15 | 17 | 14 | 34 |
| | 33 | 10 | 2 | 22 | -34 | 15 | 21 | -14 | 24 | - 5 |
| | 26 | 41 | -32 | | | | | | | |
| 35 | 9 | 16 | 35 | 8 | 20 | 18 | 23 | 34 | 42 | -23 |
| | - 3 | 18 | 9 | 23 | 13 | 28 | 16 | 31 | 5 | 34 |
| | 17 | 6 | 30 | 20 | -25 | 10 | - 6 | 3 | 21 | - 3 |
| | 24 | 42 | 5 | 39 | | | | | | |
| 36 | -23 | - 2 | -22 | - 0 | -13 | -16 | 33 | 9 | 4 | -22 |
| | -21 | 18 | -36 | 19 | -27 | 39 | - 9 | - 5 | 7 | 17 |
| | - 9 | -13 | 26 | 17 | -27 | -10 | -22 | 28 | -34 | -39 |
| | 33 | 28 | 40 | -17 | 19 | | | | | |
| 37 | 17 | 1 | 1 | 14 | 16 | - 0 | 18 | 8 | - 2 | 17 |
| | -19 | 14 | 18 | 4 | 0 | 5 | - 2 | 11 | 5 | 23 |
| | 21 | 2 | 1 | 4 | 19 | 17 | - 1 | 11 | 20 | 13 |
| | 4 | 13 | 14 | 7 | 30 | -10 | | | | |
| 38 | 5 | 13 | 28 | - 1 | 20 | 24 | -19 | 23 | 27 | -28 |
| | 30 | 1 | 16 | 5 | 41 | - 1 | 2 | 14 | - 5 | 3 |
| | 12 | - 4 | 3 | 7 | 0 | 12 | 18 | -24 | 17 | - 3 |
| | 8 | 19 | -25 | 24 | - 4 | -13 | -45 | | | |

### Table E6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 9 | 33 | 41 | 2 | 19 | 47 | - 5 | 17 | 33 | -33 |
| | 41 | - 9 | 7 | 24 | 56 | 1 | 14 | 13 | 7 | 29 |
| | 30 | 11 | -18 | - 6 | -19 | 13 | 28 | -25 | 29 | - 9 |
| | 9 | 16 | -31 | 49 | 9 | -33 | -15 | 21 | | |
| 40 | -12 | -10 | -17 | - 5 | -18 | -29 | 44 | 11 | - 5 | 4 |
| | -47 | 10 | -21 | - 1 | -44 | 31 | -28 | 15 | 18 | 7 |
| | -17 | -16 | 11 | 42 | 7 | -17 | -20 | 42 | -29 | - 3 |
| | 24 | 15 | 62 | -21 | 13 | 37 | 23 | -38 | -48 | |
| 41 | 17 | 14 | 37 | 3 | 39 | 34 | - 9 | 33 | 35 | -20 |
| | 15 | 12 | 29 | 21 | 42 | 2 | 17 | 28 | 12 | 32 |
| | 24 | - 0 | - 0 | 11 | -19 | 16 | 33 | -18 | 30 | 1 |
| | 36 | 36 | -19 | 39 | 24 | -26 | 8 | 24 | 35 | -20 |
| 42 | 29 | -14 | 8 | 10 | 15 | 7 | - 0 | 21 | 12 | 22 |
| | - 0 | 2 | 37 | - 0 | 10 | 10 | 10 | 39 | 2 | 1 |
| | 4 | 3 | 5 | 11 | 15 | 25 | 3 | -14 | 38 | 18 |
| | -19 | - 8 | - 5 | - 0 | 23 | -26 | 17 | - 4 | - 5 | 5 |
| | 10 | | | | | | | | | |
| 43 | 10 | 29 | 22 | -20 | 7 | 20 | 24 | 35 | 22 | -24 |
| | - 9 | 5 | 12 | 4 | 6 | 29 | -17 | 41 | - 5 | 37 |
| | 1 | - 7 | - 6 | 37 | 7 | 14 | - 6 | 10 | 19 | 2 |
| | 20 | 46 | 13 | 21 | 32 | - 4 | 4 | 21 | 5 | 23 |
| | 9 | 12 | | | | | | | | |
| 44 | 6 | -10 | -17 | 17 | 6 | - 5 | - 8 | - 9 | -28 | 20 |
| | 6 | - 2 | - 1 | - 1 | - 2 | -10 | 13 | - 7 | 29 | -22 |
| | 3 | - 5 | - 1 | 6 | 16 | 16 | 12 | -12 | 1 | -11 |
| | - 7 | -14 | 11 | -23 | -19 | - 1 | 3 | 2 | - 9 | 3 |
| | - 7 | 7 | -19 | | | | | | | |
| 45 | -36 | - 2 | -18 | - 4 | -38 | -30 | 13 | - 4 | -10 | - 0 |
| | -22 | -14 | -79 | 9 | -32 | 8 | -30 | -29 | 10 | -14 |
| | -17 | -25 | -12 | 4 | -13 | -36 | -32 | 31 | -66 | -14 |
| | 17 | - 6 | 29 | -22 | - 3 | 40 | -10 | -17 | -21 | 35 |
| | -44 | -39 | - 3 | 7 | | | | | | |
| 46 | 17 | -33 | - 9 | 8 | 23 | 13 | -15 | - 4 | -15 | 17 |
| | 5 | 20 | 34 | -12 | - 5 | -13 | 28 | 5 | -10 | -15 |
| | 3 | 15 | 22 | -12 | 23 | 20 | 33 | -24 | 24 | 9 |
| | -10 | -18 | 6 | -18 | -15 | -15 | - 2 | 18 | -19 | -12 |
| | 24 | 11 | -12 | 22 | -33 | | | | | |
| 47 | 24 | 26 | 33 | 7 | 11 | 19 | -28 | 12 | 7 | -18 |
| | 44 | -10 | 27 | 21 | 60 | -21 | 0 | - 2 | 19 | 3 |
| | 28 | 14 | -22 | -18 | 5 | 19 | 17 | -28 | 27 | - 2 |
| | - 2 | 1 | -39 | 32 | - 7 | -45 | 5 | 21 | 48 | -52 |
| | 26 | - 4 | -12 | 1 | -21 | - 4 | | | | |
| 48 | 13 | 15 | 0 | 10 | 15 | - 8 | 6 | 12 | - 4 | 8 |
| | -22 | 23 | 7 | 10 | 2 | 13 | -15 | 19 | 28 | 15 |
| | 11 | -24 | -12 | 32 | - 5 | 7 | 1 | 27 | 1 | - 2 |
| | 16 | 26 | 2 | 9 | 8 | - 2 | - 0 | 6 | -17 | 23 |
| | 23 | 4 | 24 | - 8 | - 3 | 2 | - 4 | | | |

## Table E6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 49 | 6 | 33 | 44 | 6 | 35 | 40 | 7 | 48 | 50 | -40 |
| | 31 | 12 | 40 | 20 | 54 | 22 | 22 | 34 | 3 | 39 |
| | 27 | - 3 | 9 | 24 | -17 | 19 | 39 | -33 | 30 | -10 |
| | 38 | 45 | -22 | 55 | 24 | -16 | - 7 | 43 | 36 | -27 |
| | 63 | 7 | 17 | -14 | -42 | 16 | 39 | 19 | | |
| 50 | 23 | 9 | 9 | - 3 | 19 | 30 | 10 | 28 | 22 | - 4 |
| | -23 | 12 | 14 | 13 | 20 | 29 | 11 | 34 | - 4 | 47 |
| | 3 | 11 | 13 | - 1 | 8 | 25 | 20 | - 2 | 26 | 7 |
| | 26 | 18 | 7 | 19 | 12 | 4 | 20 | - 5 | 7 | 5 |
| | 14 | 11 | 16 | - 6 | -13 | - 7 | 7 | 2 | 17 | |
| 51 | 40 | 7 | 13 | 19 | 36 | 23 | 12 | 12 | - 3 | 3 |
| | 13 | 16 | 17 | 18 | 26 | 11 | 27 | 21 | 26 | 17 |
| | 31 | 17 | 20 | 22 | -12 | 47 | 27 | - 2 | 42 | 1 |
| | - 9 | 9 | - 1 | 23 | 25 | - 7 | 1 | 13 | 22 | - 9 |
| | 18 | 20 | 18 | 18 | -26 | 12 | 21 | 20 | 24 | 14 |
| 52 | - 5 | -10 | 9 | 2 | - 8 | - 3 | 18 | 13 | - 2 | -10 |
| | - 9 | 8 | - 5 | 15 | - 1 | 9 | 11 | 10 | 33 | 3 |
| | - 8 | 8 | 22 | 18 | -12 | - 3 | 8 | 13 | - 7 | -18 |
| | 19 | 3 | 31 | - 1 | 23 | 19 | 8 | - 8 | 1 | 31 |
| | 6 | - 2 | - 7 | 32 | 14 | -13 | 3 | - 5 | - 4 | 9 |
| | 26 | | | | | | | | | |
| 53 | 16 | 11 | - 7 | 5 | 28 | 18 | 2 | 24 | 25 | 8 |
| | - 4 | 11 | 16 | 8 | 12 | 14 | 10 | 6 | - 2 | 15 |
| | 14 | 20 | 1 | 4 | -12 | 24 | 19 | 3 | 20 | 4 |
| | 9 | 32 | 3 | 24 | 15 | - 7 | 7 | 2 | 18 | -13 |
| | 30 | 23 | 13 | - 3 | -33 | - 0 | - 1 | 8 | 25 | 5 |
| | 33 | - 1 | | | | | | | | |
| 54 | - 7 | -36 | -23 | -14 | 9 | - 9 | 8 | -21 | -19 | 17 |
| | -20 | 14 | 0 | -21 | -29 | - 3 | 10 | 4 | -24 | -19 |
| | -16 | - 1 | 19 | 2 | 15 | 3 | 7 | - 1 | - 4 | 15 |
| | - 5 | -11 | 18 | -30 | -13 | 22 | - 7 | 2 | -39 | 24 |
| | - 1 | - 9 | - 6 | 13 | 3 | 60 | -45 | - 2 | - 9 | -12 |
| | -12 | - 6 | -12 | | | | | | | |
| 55 | 27 | 36 | 39 | 3 | 29 | 37 | -15 | 18 | 25 | -25 |
| | 36 | - 5 | 33 | 18 | 60 | 3 | 8 | 35 | 14 | 18 |
| | 32 | 1 | -12 | 0 | 5 | 22 | 24 | -33 | 41 | - 2 |
| | 4 | 4 | -45 | 39 | 4 | -33 | -15 | 45 | 60 | -54 |
| | 28 | 15 | 10 | - 3 | -37 | 5 | 53 | 3 | 49 | 4 |
| | 28 | -14 | 5 | -27 | | | | | | |
| 56 | 10 | 33 | 31 | 20 | 27 | 45 | 2 | 30 | 36 | -33 |
| | 20 | 3 | 23 | 29 | 49 | 14 | 13 | 17 | 20 | 27 |
| | 31 | 1 | 4 | 7 | -27 | 11 | 36 | -34 | 26 | -18 |
| | 21 | 26 | -23 | 51 | 16 | -16 | - 8 | 19 | 61 | -38 |
| | 48 | 9 | - 4 | - 2 | -34 | 6 | 39 | 6 | 56 | 10 |
| | 36 | 4 | 38 | -25 | 59 | | | | | |

### Table E6 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57 | 12 | -17 | -45 | -12 | -20 | -32 | -11 | -23 | -31 | 37 |
| | -38 | -19 | -11 | -14 | -44 | - 8 | -35 | - 5 | -16 | - 8 |
| | -35 | 3 | - 7 | -10 | 30 | - 7 | -19 | 36 | -19 | 2 |
| | -20 | -11 | 26 | -43 | -16 | 11 | 4 | -15 | -47 | 21 |
| | -32 | - 0 | 10 | - 7 | 12 | 2 | -27 | 2 | -35 | - 9 |
| | -14 | -27 | - 0 | 11 | -28 | -40 | | | | |
| 58 | - 7 | 18 | 42 | 19 | 11 | 31 | -10 | 14 | 29 | -36 |
| | 41 | 13 | 6 | 19 | 45 | - 5 | 23 | - 1 | 16 | 8 |
| | 34 | 3 | 1 | 6 | -27 | 2 | 10 | -27 | 16 | -11 |
| | 17 | 10 | -30 | 37 | 21 | - 8 | - 8 | 18 | 57 | -28 |
| | 33 | - 7 | -10 | 9 | - 7 | - 4 | 43 | 1 | 27 | - 6 |
| | 24 | 25 | - 2 | -19 | 44 | 52 | -73 | | | |
| 59 | -13 | 19 | 40 | 3 | 15 | 27 | 30 | 46 | 41 | -35 |
| | - 5 | 30 | 7 | 18 | 14 | 40 | 6 | 31 | 8 | 49 |
| | 18 | -19 | 11 | 36 | -14 | 6 | 14 | 8 | 10 | -15 |
| | 44 | 39 | 23 | 33 | 40 | 18 | 6 | 4 | 15 | 36 |
| | 37 | - 3 | 28 | - 4 | 5 | 2 | -16 | 31 | 31 | 28 |
| | 5 | 29 | - 2 | 6 | - 2 | 26 | -45 | 34 | | |
| 60 | 30 | - 8 | 26 | 10 | 34 | 31 | 3 | 12 | 11 | 0 |
| | 21 | 26 | 37 | 7 | 32 | -14 | 27 | 24 | 3 | 13 |
| | 29 | 33 | 16 | - 0 | 6 | 30 | 33 | -23 | 50 | 8 |
| | - 9 | 13 | -18 | 25 | 19 | -26 | 9 | 15 | 24 | -15 |
| | 47 | 30 | 8 | 1 | -43 | 23 | 9 | 9 | 27 | 17 |
| | 42 | 5 | 24 | - 1 | 16 | 28 | -31 | 16 | 12 | |
| 61 | 32 | - 8 | -21 | 20 | 30 | 10 | -35 | 2 | - 6 | 24 |
| | 9 | 15 | 38 | 11 | 11 | - 6 | - 7 | 9 | 4 | -11 |
| | 10 | 19 | 7 | -10 | 30 | 38 | 8 | -22 | 29 | - 3 |
| | -16 | 5 | 6 | -20 | - 9 | - 9 | - 5 | 19 | - 5 | -18 |
| | - 3 | 23 | 6 | 40 | -27 | 36 | 6 | - 3 | - 2 | - 2 |
| | 21 | - 3 | 23 | 7 | 14 | 10 | 13 | - 5 | -20 | 20 |
| 62 | 11 | 6 | 41 | 30 | 24 | 13 | -10 | 8 | 10 | -10 |
| | 44 | 8 | 21 | 4 | 28 | -18 | 22 | 5 | 18 | - 5 |
| | 44 | 3 | -11 | 1 | 1 | 8 | 13 | -29 | 28 | - 0 |
| | 2 | - 4 | -14 | 17 | 1 | -34 | 15 | 1 | 35 | -16 |
| | 26 | 2 | -13 | 31 | -17 | 11 | 42 | 1 | 18 | - 3 |
| | 19 | 20 | - 2 | -18 | 29 | 25 | -49 | 49 | 20 | 30 |
| | 4 | | | | | | | | | |
| 63 | 30 | 1 | 15 | 14 | 32 | 37 | -30 | 5 | - 1 | 18 |
| | 26 | 5 | 56 | 8 | 38 | -11 | 21 | 23 | 15 | 5 |
| | 19 | 17 | 2 | -26 | 11 | 42 | 50 | -39 | 54 | 10 |
| | - 5 | - 3 | -14 | 5 | -14 | -41 | 12 | 24 | 17 | -34 |
| | 49 | 16 | - 6 | 35 | -53 | 52 | 34 | - 4 | 33 | 9 |
| | 21 | 3 | 14 | 14 | 25 | 27 | -23 | 15 | 2 | 40 |
| | 43 | 37 | | | | | | | | |

## Table E6 Continued

### Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 64 | 10 | - 7 | - 6 | 4 | -17 | - 2 | - 1 | - 6 | -12 | - 1 |
| | 12 | 9 | 17 | 10 | 4 | -10 | - 1 | -11 | 5 | -17 |
| | - 3 | 9 | 18 | - 6 | 13 | 5 | 2 | -23 | 5 | - 7 |
| | -15 | - 8 | - 1 | - 2 | 3 | 8 | - 1 | - 2 | - 6 | - 6 |
| | -13 | 9 | -11 | 3 | - 8 | 13 | 17 | - 0 | 7 | -14 |
| | 17 | - 9 | -11 | - 8 | 13 | 15 | 7 | 5 | -14 | 3 |
| | 22 | -15 | - 8 | | | | | | | |
| 65 | 31 | 16 | 30 | 22 | 39 | 32 | -21 | 12 | 16 | - 6 |
| | 40 | 9 | 35 | 18 | 48 | -13 | 16 | 16 | 22 | 4 |
| | 41 | 15 | -12 | - 5 | - 2 | 33 | 27 | -45 | 45 | 2 |
| | 3 | 2 | -25 | 37 | 6 | -49 | 10 | 23 | 50 | -44 |
| | 52 | 27 | - 3 | 9 | -45 | 25 | 55 | - 2 | 48 | 8 |
| | 37 | - 5 | 37 | -26 | 56 | 57 | -34 | 32 | - 4 | 44 |
| | 24 | 43 | 47 | 7 | | | | | | |
| 66 | 18 | 17 | 26 | 23 | 33 | 37 | 4 | 21 | 24 | -18 |
| | 28 | 16 | 22 | 21 | 43 | 3 | 31 | 11 | 23 | 6 |
| | 37 | 7 | 10 | 5 | -34 | 25 | 26 | -24 | 31 | - 3 |
| | 23 | 26 | -25 | 44 | 32 | -11 | 7 | 11 | 41 | -30 |
| | 53 | 21 | - 2 | - 5 | -32 | 14 | 36 | 11 | 53 | 4 |
| | 34 | 8 | 33 | - 7 | 38 | 57 | -49 | 48 | 12 | 38 |
| | 5 | 25 | 31 | - 0 | 38 | | | | | |
| 67 | -50 | -23 | -25 | - 2 | -20 | -17 | - 0 | -29 | -26 | - 1 |
| | -16 | 16 | -29 | -10 | -28 | -17 | - 8 | -40 | - 7 | -27 |
| | -17 | - 6 | - 0 | - 4 | -23 | -35 | - 8 | 11 | -43 | - 3 |
| | 0 | -14 | 20 | -19 | -10 | 28 | -16 | - 7 | -18 | 15 |
| | -20 | -33 | -21 | - 2 | 33 | -13 | -22 | 4 | -16 | -23 |
| | - 9 | 17 | - 1 | 12 | -36 | -11 | - 6 | 2 | 6 | -18 |
| | -13 | -12 | -27 | - 2 | -27 | -10 | | | | |
| 68 | -12 | 27 | 4 | 0 | -10 | - 7 | 64 | 36 | 13 | -26 |
| | -16 | 2 | -28 | 7 | -17 | 57 | -19 | 16 | 18 | 39 |
| | 1 | -16 | 4 | 55 | -20 | - 1 | -17 | 32 | -20 | -22 |
| | 32 | 41 | 38 | 16 | 27 | 31 | 13 | -12 | - 8 | 30 |
| | -15 | - 7 | 39 | - 8 | 32 | -30 | -17 | 15 | 5 | 6 |
| | 5 | 16 | -13 | -12 | -12 | - 8 | 5 | -10 | 38 | -23 |
| | -37 | -12 | -40 | - 7 | -26 | -15 | - 4 | | | |
| 69 | 7 | 20 | 25 | -11 | 21 | 22 | 12 | 27 | 26 | -30 |
| | - 1 | 2 | 30 | 20 | 21 | 15 | -14 | 37 | 11 | 33 |
| | 14 | - 8 | 6 | 29 | 1 | 5 | 12 | - 8 | 22 | -20 |
| | 35 | 45 | 14 | 30 | 24 | - 1 | 12 | 24 | 19 | 10 |
| | 49 | 0 | 39 | - 6 | -26 | 19 | 7 | 10 | 47 | 10 |
| | 13 | 5 | 10 | 11 | 25 | 34 | - 9 | 12 | 35 | 30 |
| | 15 | 8 | 26 | - 3 | 31 | 25 | -19 | 16 | | |

### Table 26 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 | -11 | 4 | - 6 | - 6 | - 9 | - 7 | 34 | 20 | 16 | -16 |
| | -23 | - 4 | -22 | - 9 | -34 | 38 | -10 | 9 | - 5 | 29 |
| | -16 | - 4 | 2 | 33 | 5 | -20 | -17 | 34 | -21 | -14 |
| | 21 | 6 | 34 | - 5 | 7 | 18 | 4 | -24 | - 7 | 33 |
| | -18 | - 9 | 13 | - 5 | 30 | -23 | -23 | - 3 | -10 | 10 |
| | -19 | 24 | -17 | - 2 | -29 | -18 | 14 | -21 | 34 | -28 |
| | -20 | - 4 | -33 | -23 | -33 | -21 | 11 | 38 | 6 | |
| 71 | 21 | 23 | 37 | 5 | 42 | 44 | 20 | 43 | 43 | -27 |
| | 7 | 20 | 30 | 20 | 43 | 27 | 43 | 28 | 5 | 31 |
| | 21 | 3 | 19 | 29 | -13 | 32 | 39 | -20 | 43 | - 1 |
| | 19 | 34 | -11 | 43 | 29 | -16 | 14 | 23 | 30 | - 8 |
| | 30 | 10 | 13 | 5 | -34 | 17 | 20 | 12 | 32 | 24 |
| | 30 | 20 | 24 | - 8 | 28 | 36 | -38 | 23 | 43 | 34 |
| | 9 | 24 | 33 | - 7 | 34 | 34 | -26 | 2 | 29 | - 4 |
| 72 | -17 | 12 | 33 | - 5 | 21 | 36 | - 1 | 35 | 37 | -41 |
| | 18 | 16 | 18 | 5 | 24 | 10 | 28 | 8 | -23 | 11 |
| | 5 | 5 | 16 | 8 | -32 | - 5 | 3 | -24 | 13 | - 7 |
| | 33 | 43 | -13 | 38 | 41 | 12 | -19 | 27 | 26 | -21 |
| | 39 | 5 | 17 | -24 | -19 | 11 | - 0 | - 7 | 43 | - 3 |
| | - 2 | - 1 | 23 | 6 | 13 | -33 | -36 | -36 | 30 | 16 |
| | 1 | 6 | 1 | - 3 | 9 | 44 | - 1 | -10 | 21 | -14 |
| | 33 | | | | | | | | | |
| 73 | -26 | - 5 | -10 | - 5 | 5 | -15 | 36 | 14 | 9 | - 1 |
| | -45 | 21 | -13 | - 5 | -48 | 32 | 5 | 5 | - 7 | 13 |
| | -14 | -12 | 19 | 37 | -13 | -17 | -17 | 34 | -23 | - 6 |
| | 27 | 24 | 42 | - 2 | 33 | 27 | 32 | -31 | -43 | 38 |
| | 0 | - 6 | 13 | -10 | 14 | 4 | -33 | 23 | - 5 | 8 |
| | -13 | 12 | 5 | 33 | -33 | -28 | 11 | -28 | 41 | -13 |
| | -26 | -17 | -24 | -30 | -38 | -10 | 18 | 40 | 13 | 43 |
| | 4 | 7 | | | | | | | | |
| 74 | 11 | 29 | 25 | 10 | 10 | 9 | 11 | 18 | 10 | -22 |
| | 4 | 12 | 5 | 4 | - 2 | 25 | - 9 | 27 | 40 | 15 |
| | 28 | -18 | - 3 | 37 | - 4 | 15 | -12 | 15 | 11 | -18 |
| | 10 | 17 | 24 | 24 | 17 | 0 | 11 | - 6 | 5 | 38 |
| | - 7 | 16 | 27 | 8 | 3 | -16 | 3 | 29 | 15 | 2 |
| | 23 | 23 | - 8 | -22 | 12 | 13 | -18 | 8 | 37 | - 2 |
| | -11 | 15 | -13 | 4 | 14 | 10 | -16 | 37 | 27 | 37 |
| | 16 | -13 | 22 | | | | | | | |
| 75 | 10 | 30 | 65 | 11 | 37 | 52 | 1 | 48 | 63 | -40 |
| | 41 | 17 | 32 | 22 | 69 | 18 | 30 | 39 | - 1 | 37 |
| | 34 | - 0 | 12 | 1 | -10 | 23 | 29 | -43 | 44 | - 2 |
| | 30 | 33 | -39 | 47 | 30 | - 8 | -12 | 41 | 31 | -32 |
| | 48 | 13 | 14 | - 8 | -29 | 6 | 27 | - 6 | 60 | 19 |
| | 14 | 5 | 12 | -12 | 30 | 33 | -44 | 33 | 42 | 32 |
| | 6 | 32 | 30 | - 6 | 39 | 50 | -27 | -10 | 30 | -19 |
| | 32 | 57 | -19 | 2 | | | | | | |

## Table E6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 76 | 3 | -1 | -15 | 4 | 9 | -6 | 52 | 37 | 14 | -18 |
| | -12 | 29 | -8 | 16 | -17 | 58 | 12 | 6 | 6 | 24 |
| | -5 | 7 | 33 | 37 | -19 | 18 | -5 | 18 | -4 | -8 |
| | 32 | 30 | 40 | -4 | 26 | 41 | 0 | -15 | -24 | 33 |
| | -7 | 1 | 17 | -9 | 10 | 1 | -25 | 14 | 6 | 12 |
| | 17 | 16 | 8 | 7 | -30 | -10 | -2 | -14 | 27 | 1 |
| | -7 | -21 | -18 | 8 | -22 | 3 | 5 | 43 | 4 | 28 |
| | 22 | 12 | 39 | 20 | -2 | | | | | |
| 77 | 42 | -1 | 4 | 21 | 44 | 27 | -19 | 16 | 10 | 21 |
| | 9 | 24 | 52 | 21 | 26 | 10 | 3 | 28 | 6 | 20 |
| | 21 | 26 | 7 | -14 | 31 | 50 | 13 | -14 | 52 | 2 |
| | -6 | 10 | -5 | -5 | 4 | -11 | 25 | -7 | 6 | -15 |
| | 18 | 34 | -1 | 24 | -42 | 34 | 7 | 1 | 4 | 24 |
| | 17 | -1 | 20 | 8 | 18 | 18 | -1 | 3 | 7 | 33 |
| | 56 | 16 | 49 | 13 | 25 | 6 | -37 | -26 | 9 | -22 |
| | 18 | 2 | -16 | -8 | 18 | 1 | | | | |
| 78 | 19 | -7 | 5 | -5 | 29 | 24 | -17 | 17 | 16 | -5 |
| | 12 | 33 | 39 | 4 | 23 | -10 | 14 | 23 | -11 | -5 |
| | 8 | 26 | 11 | -3 | 22 | 28 | 21 | -32 | 40 | -2 |
| | -8 | 11 | -18 | -1 | 3 | -7 | 1 | 21 | 5 | -14 |
| | 22 | 22 | 16 | 7 | -33 | 31 | 7 | -13 | 18 | 11 |
| | 20 | -0 | 22 | 10 | 25 | 21 | -4 | 9 | -4 | 39 |
| | 44 | 4 | 28 | 19 | 31 | 17 | -19 | -29 | 25 | -35 |
| | 28 | 27 | -22 | -10 | 29 | -0 | 38 | | | |
| 79 | -3 | -2 | -7 | -6 | 16 | 15 | -11 | 12 | 18 | -2 |
| | -3 | 23 | 34 | -7 | -11 | 16 | 16 | 7 | -34 | 11 |
| | -7 | 26 | 13 | -18 | 10 | 14 | 8 | -8 | 22 | 6 |
| | 9 | 17 | 11 | -2 | 12 | 9 | 6 | -21 | -12 | 4 |
| | 11 | -2 | 12 | -2 | -17 | 28 | -27 | -11 | 4 | 3 |
| | -15 | -13 | 28 | 26 | -25 | -1 | 8 | -10 | 21 | 11 |
| | 24 | -5 | 20 | -7 | -8 | -7 | -2 | -13 | 14 | 5 |
| | 16 | 32 | 31 | -23 | 13 | 27 | 35 | 31 | | |
| 80 | 20 | 11 | 41 | -6 | 12 | 29 | -19 | 17 | 18 | -8 |
| | 28 | 7 | 52 | 8 | 46 | -10 | 2 | 26 | 3 | 12 |
| | 18 | 3 | -1 | -6 | 23 | 28 | 31 | -38 | 38 | 9 |
| | -5 | 7 | -26 | 16 | -2 | -36 | 2 | 35 | 17 | -28 |
| | 27 | 7 | 19 | 14 | -29 | 23 | 39 | 9 | 37 | 12 |
| | 10 | -5 | -8 | -8 | 38 | 23 | -7 | 13 | 8 | 18 |
| | 30 | 35 | 46 | 8 | 26 | 7 | -29 | -16 | 21 | -21 |
| | 31 | 13 | -31 | 2 | 29 | -27 | 27 | 23 | 5 | |
| 81 | 0 | 23 | 20 | -6 | 6 | 31 | -42 | 15 | 37 | -16 |
| | 16 | -4 | 17 | 13 | 46 | -12 | 7 | 1 | -24 | 12 |
| | 5 | 19 | -20 | -44 | -9 | 1 | 17 | -21 | 19 | -3 |
| | 6 | 18 | -34 | 24 | 4 | -4 | -18 | 28 | 32 | -49 |
| | 26 | -12 | 1 | -19 | -17 | -4 | 15 | -15 | 24 | 12 |
| | -14 | -26 | 26 | -11 | 26 | 27 | -9 | 19 | -0 | 13 |
| | 13 | -2 | 19 | -7 | 15 | 17 | -5 | -44 | 2 | -29 |
| | 9 | 38 | -27 | -49 | 42 | -29 | 13 | 22 | 32 | 21 |

Table E6 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 82 | 31 | 19 | 38 | 5 | 34 | 49 | -24 | 16 | 39 | -14 |
| | 30 | 7 | 31 | 22 | 73 | -12 | 21 | 16 | -2 | 14 |
| | 24 | 11 | 6 | -29 | -7 | 38 | 37 | -36 | 47 | 18 |
| | -2 | 20 | -44 | 35 | 17 | -23 | 1 | 31 | 41 | -51 |
| | 44 | 4 | -4 | -1 | -33 | 13 | 46 | -0 | 44 | 18 |
| | 27 | -6 | 28 | -16 | 41 | 45 | -29 | 36 | 1 | 29 |
| | 19 | 18 | 43 | -1 | 42 | 44 | -20 | -34 | 13 | -45 |
| | 45 | 36 | -40 | -21 | 58 | -18 | 32 | 25 | 4 | 39 |
| | 46 | | | | | | | | | |
| 83 | -22 | -19 | -30 | -7 | -30 | -38 | 17 | -19 | -40 | 20 |
| | -27 | -6 | -10 | -26 | -57 | 7 | -18 | -8 | -5 | -7 |
| | -26 | 3 | 7 | 6 | 18 | -22 | -22 | 31 | -25 | -5 |
| | -10 | -26 | 40 | -45 | -13 | 24 | 12 | -35 | -47 | 49 |
| | -40 | -16 | -3 | 4 | 25 | -2 | -39 | 0 | -46 | -6 |
| | -25 | 8 | -30 | 19 | -48 | -51 | 32 | -37 | 8 | -22 |
| | -20 | -9 | -22 | -2 | -47 | -56 | 23 | 31 | -14 | 46 |
| | -37 | -46 | 41 | 10 | -51 | 17 | -9 | -29 | 13 | -33 |
| | -39 | -65 | | | | | | | | |
| 84 | 43 | 10 | 33 | 9 | 21 | 16 | -3 | 15 | 10 | 1 |
| | 30 | -3 | 33 | 13 | 32 | 11 | 1 | 41 | 7 | 16 |
| | 22 | 13 | 10 | 6 | 25 | 40 | 15 | -17 | 45 | 1 |
| | -1 | 7 | -17 | 13 | 3 | -20 | 7 | 12 | 20 | -9 |
| | 14 | 39 | 12 | 7 | -30 | 16 | 25 | -17 | 16 | 20 |
| | 19 | -10 | -1 | -4 | 33 | 14 | 0 | 2 | -7 | 29 |
| | 25 | 15 | 25 | 20 | 34 | 13 | -74 | 0 | 21 | -17 |
| | 18 | 1 | -30 | 15 | 26 | -10 | 44 | 32 | -2 | 30 |
| | 2 | 18 | -21 | | | | | | | |
| 85 | 41 | 10 | 18 | 14 | 28 | 15 | 12 | 12 | 9 | 5 |
| | 4 | 21 | 30 | 18 | 22 | 9 | -5 | 45 | 29 | 25 |
| | 35 | -4 | 8 | 15 | 18 | 37 | 5 | 3 | 42 | 1 |
| | 7 | 24 | 8 | 11 | 29 | -2 | 25 | 7 | 3 | 11 |
| | 20 | 41 | 17 | 9 | -25 | 12 | 7 | 25 | 19 | 23 |
| | 27 | 4 | -3 | 6 | 24 | 15 | -9 | 5 | 18 | 36 |
| | 20 | 13 | 18 | 25 | 23 | 18 | -30 | 15 | 27 | -9 |
| | 19 | -1 | -5 | 32 | 14 | 5 | 35 | 10 | -17 | 24 |
| | -22 | 10 | -14 | 42 | | | | | | |
| 86 | 4 | 13 | 36 | 3 | 30 | 41 | 17 | 51 | 42 | -41 |
| | 9 | 21 | 18 | 12 | 32 | 34 | 14 | 35 | -2 | 48 |
| | 17 | 1 | 29 | 23 | -8 | 20 | 38 | -17 | 23 | -10 |
| | 37 | 42 | 5 | 41 | 32 | 4 | -2 | 28 | 28 | -1 |
| | 40 | 0 | 26 | -5 | -23 | 20 | 2 | 16 | 51 | 19 |
| | 27 | 10 | 19 | 5 | 21 | 45 | -21 | 26 | 48 | 22 |
| | 14 | 11 | 19 | -4 | 19 | 26 | -10 | 16 | 44 | 3 |
| | 37 | 37 | 14 | 9 | 53 | 12 | 18 | 15 | 20 | 25 |
| | 17 | 34 | -27 | 9 | 13 | | | | | |

## Table E6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 87 | 11 | 25 | 51 | -14 | 26 | 47 | -10 | 39 | 57 | -39 |
| | 34 | -8 | 36 | 18 | 58 | 7 | 25 | 29 | -22 | 30 |
| | 21 | 4 | 3 | -3 | -9 | 18 | 28 | -31 | 39 | 7 |
| | 18 | 32 | -37 | 47 | 23 | -16 | -20 | 52 | 49 | -42 |
| | 52 | 7 | 23 | -21 | -34 | 12 | 28 | -5 | 62 | 2 |
| | 15 | -8 | 25 | -9 | 52 | 46 | -35 | 36 | 26 | 24 |
| | 4 | 17 | 23 | -7 | 36 | 37 | -16 | -20 | 32 | -20 |
| | 50 | 65 | -31 | -12 | 68 | -14 | 11 | 27 | 16 | 39 |
| | 51 | 57 | -57 | 17 | 4 | 42 | | | | |
| 88 | -6 | 18 | -0 | 2 | 19 | 14 | 2 | 31 | 23 | -14 |
| | -23 | 22 | 15 | 3 | 3 | 27 | 5 | 3 | -9 | 32 |
| | 3 | -3 | -5 | 4 | -4 | 7 | -2 | 7 | 8 | -12 |
| | 26 | 26 | 17 | 24 | 18 | 13 | 15 | -1 | -3 | 4 |
| | 3 | -20 | 19 | -8 | -3 | 2 | -10 | 21 | 9 | 18 |
| | -4 | -1 | 0 | -2 | -8 | 4 | -5 | -5 | 39 | -5 |
| | -1 | 6 | 5 | -3 | -13 | -11 | 12 | 9 | 10 | 21 |
| | 20 | 21 | 25 | 0 | 10 | 30 | 15 | 1 | 35 | 6 |
| | 15 | -6 | 11 | -34 | -8 | 23 | 10 | | | |
| 89 | 11 | 50 | 33 | 5 | 34 | 55 | 10 | 34 | 46 | -38 |
| | 10 | 5 | 26 | 26 | 45 | 31 | 14 | 23 | 10 | 43 |
| | 23 | 12 | -14 | 5 | -15 | 22 | 28 | -4 | 34 | -8 |
| | 38 | 41 | -8 | 56 | 19 | -6 | -5 | 20 | 56 | -17 |
| | 39 | -0 | 20 | -8 | -35 | -5 | 15 | -4 | 53 | 15 |
| | 26 | -5 | 40 | -19 | 43 | 59 | -28 | 32 | 31 | 21 |
| | 1 | 12 | 22 | -4 | 34 | 32 | -8 | 5 | 36 | 5 |
| | 49 | 35 | -9 | 12 | 50 | 8 | 15 | 20 | 26 | 12 |
| | 35 | 35 | -33 | 6 | 7 | 46 | 51 | 24 | | |
| 90 | 11 | 38 | 44 | -5 | 27 | 57 | -11 | 36 | 56 | -45 |
| | 35 | 4 | 27 | 19 | 63 | 8 | 31 | 15 | -9 | 27 |
| | 25 | 3 | 6 | -5 | -22 | 25 | 34 | -46 | 37 | -9 |
| | 20 | 34 | -37 | 51 | 19 | -11 | -26 | 47 | 60 | -53 |
| | 38 | -2 | 12 | -10 | -29 | 5 | 38 | -7 | 60 | 13 |
| | 25 | -12 | 23 | -21 | 58 | 63 | -40 | 44 | 17 | 23 |
| | 14 | 19 | 24 | 8 | 43 | 46 | -18 | -19 | 23 | -29 |
| | 48 | 62 | -38 | -8 | 69 | -8 | 9 | 27 | 9 | 42 |
| | 53 | 61 | -67 | 16 | 4 | 51 | 79 | 19 | 55 | |
| 91 | 10 | 21 | 8 | -11 | 0 | 11 | 7 | 7 | 13 | -7 |
| | -8 | 9 | 27 | 2 | -1 | 15 | -12 | 15 | 4 | 6 |
| | -2 | -19 | 3 | 12 | 8 | 13 | -18 | 0 | 12 | -17 |
| | 15 | 31 | 26 | 5 | 15 | 7 | 2 | 8 | -13 | 15 |
| | 7 | 7 | 29 | 3 | -12 | 2 | 1 | 17 | 11 | -0 |
| | -2 | 2 | -4 | 0 | -1 | -3 | 14 | -9 | 7 | -11 |
| | 18 | -5 | 9 | 18 | -8 | 2 | -13 | 10 | 26 | 10 |
| | 9 | 18 | 9 | 20 | -5 | 13 | 6 | 3 | 4 | 33 |
| | -13 | -0 | -6 | 6 | 27 | 8 | 4 | 16 | 11 | 8 |

### Table E6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 92 | 16 | 24 | 61 | 13 | 30 | 38 | -15 | 15 | 36 | -19 |
| | 41 | 2 | 20 | 15 | 64 | -15 | 23 | 25 | 17 | 5 |
| | 38 | 2 | - 6 | 2 | -12 | 22 | 25 | -39 | 37 | 7 |
| | 4 | 15 | -53 | 54 | 22 | -38 | - 6 | 35 | 50 | -41 |
| | 49 | 24 | 4 | 3 | -32 | 5 | 42 | - 1 | 53 | 5 |
| | 27 | 3 | 16 | -19 | 59 | 49 | -49 | 50 | 9 | 39 |
| | 6 | 39 | 29 | - 6 | 63 | 59 | -32 | -18 | 23 | -41 |
| | 38 | 35 | -29 | 12 | 66 | -32 | 9 | 21 | -20 | 32 |
| | 28 | 58 | -65 | 37 | 24 | 35 | 52 | -28 | 34 | 53 |
| | - 6 | | | | | | | | | |
| 93 | - 1 | -39 | -30 | 4 | - 3 | -33 | 13 | -22 | -43 | 28 |
| | -28 | 17 | -11 | - 5 | -39 | -10 | -21 | - 9 | 6 | - 8 |
| | - 3 | - 0 | 6 | 16 | 1 | - 6 | -21 | 42 | -20 | 9 |
| | -17 | - 3 | 31 | -25 | 13 | 16 | 30 | -35 | -45 | 41 |
| | -12 | 4 | 7 | - 2 | 6 | - 7 | -29 | 23 | -23 | -14 |
| | 10 | 8 | 1 | 14 | -47 | -37 | 36 | -34 | -10 | - 3 |
| | - 5 | -28 | -25 | 11 | -25 | -13 | 33 | 13 | - 6 | 5 |
| | -22 | -27 | 33 | 5 | -53 | 19 | - 9 | -10 | - 3 | -19 |
| | -34 | -31 | 29 | -28 | 6 | -17 | -43 | 3 | -28 | -55 |
| | 4 | -36 | | | | | | | | |
| 94 | 16 | - 2 | 19 | - 3 | 18 | 30 | - 4 | 22 | 25 | -16 |
| | 16 | 24 | 38 | -16 | 8 | 10 | 34 | 20 | -39 | 20 |
| | 1 | 40 | 32 | 2 | 4 | 25 | 21 | -26 | 41 | 6 |
| | - 1 | 17 | - 9 | 13 | 18 | - 3 | 9 | - 6 | 8 | -11 |
| | 22 | - 5 | 8 | -13 | -33 | 24 | - 8 | -11 | 19 | 17 |
| | 2 | -12 | 27 | 16 | - 9 | 18 | - 7 | 6 | 21 | 29 |
| | 10 | 7 | 24 | -13 | 7 | 6 | -17 | - 8 | 17 | 2 |
| | 31 | 28 | 20 | -10 | 25 | 22 | 35 | 33 | 63 | 7 |
| | 23 | 19 | 5 | 15 | -10 | 28 | 24 | 24 | 22 | 21 |
| | - 8 | - 3 | -13 | | | | | | | |
| 95 | 51 | 22 | 19 | 15 | 42 | 35 | - 5 | 34 | 37 | -13 |
| | 7 | 9 | 59 | 19 | 38 | 18 | 4 | 49 | - 4 | 34 |
| | 26 | 14 | 18 | 13 | 5 | 47 | 29 | -17 | 61 | - 1 |
| | 6 | 39 | -10 | 33 | 23 | -12 | 10 | 24 | 14 | - 8 |
| | 38 | 43 | 30 | - 9 | -67 | 15 | 13 | 12 | 44 | 23 |
| | 34 | -10 | 31 | - 9 | 28 | 26 | -10 | 6 | 12 | 42 |
| | 34 | 6 | 38 | 9 | 34 | 29 | -42 | - 3 | 39 | -18 |
| | 35 | 24 | - 8 | 14 | 40 | 7 | 36 | 33 | 13 | 18 |
| | 13 | 33 | -27 | 38 | 36 | 36 | 36 | 3 | 39 | 32 |
| | 20 | 28 | - 9 | 25 | | | | | | |
| 96 | -12 | 10 | -14 | 12 | - 7 | -20 | 16 | - 4 | - 1 | 7 |
| | -23 | 5 | -28 | 9 | -22 | 13 | -26 | -14 | 12 | 4 |
| | 4 | - 7 | - 1 | 10 | -17 | - 4 | -20 | 29 | -25 | -10 |
| | 13 | 6 | 31 | - 3 | 15 | 27 | 20 | -27 | -16 | 33 |
| | -19 | -16 | - 6 | 4 | 33 | -24 | -17 | - 3 | -23 | -12 |
| | -11 | 14 | -10 | 5 | -19 | -22 | 10 | - 2 | 11 | -38 |
| | -24 | - 4 | -29 | - 5 | -23 | -12 | 23 | 38 | -14 | 32 |
| | -22 | -16 | 32 | 10 | -28 | 12 | -19 | -30 | -11 | -22 |
| | -17 | -28 | 30 | -13 | 3 | -11 | -32 | 4 | - 7 | -32 |
| | 11 | -15 | 22 | -25 | -20 | | | | | |

## Table E6 Continued

### Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 97 | 19 | 6 | 4 | 4 | 24 | 29 | 21 | 52 | 47 | -18 |
| | -16 | 22 | 11 | 17 | 5 | 52 | 23 | 32 | -10 | 45 |
| | 2 | 21 | 25 | 13 | -6 | 17 | 23 | -0 | 23 | -4 |
| | 25 | 35 | 16 | 17 | 24 | 21 | 13 | -11 | 2 | 20 |
| | 17 | 7 | 17 | -5 | -4 | 12 | -22 | 7 | 10 | 30 |
| | 2 | 4 | 20 | 8 | -14 | 8 | -7 | -0 | 34 | 22 |
| | 3 | 3 | 12 | -19 | -9 | 0 | -34 | 16 | 12 | 22 |
| | 45 | 24 | 32 | -1 | 28 | 43 | 30 | 21 | 53 | 3 |
| | 16 | 15 | 6 | 14 | 2 | 34 | 14 | 34 | 27 | 16 |
| | 4 | -5 | -16 | 53 | 24 | -10 | | | | |
| 98 | 23 | -15 | -0 | 13 | 15 | 18 | -29 | -15 | -12 | 24 |
| | 8 | 19 | 34 | -8 | -0 | -15 | -11 | 9 | 3 | -11 |
| | -4 | 23 | 8 | -15 | 32 | 31 | 7 | -18 | 36 | 1 |
| | -26 | -15 | -3 | -28 | -9 | 3 | 4 | 1 | -15 | -6 |
| | -10 | 20 | -16 | 28 | -25 | 32 | -8 | -12 | -11 | 4 |
| | 8 | 4 | -6 | 20 | -0 | -10 | 7 | -9 | -21 | 12 |
| | 43 | -3 | 34 | 14 | 2 | -8 | -20 | -28 | -10 | -19 |
| | -7 | -8 | -14 | 0 | 3 | -10 | 54 | 30 | 12 | 14 |
| | 0 | 10 | -2 | 27 | 20 | -6 | -10 | -7 | -11 | -7 |
| | 7 | -1 | -3 | 18 | 20 | -24 | 9 | | | |
| 99 | -11 | -1 | -7 | -8 | -14 | -7 | 43 | 2 | -8 | -9 |
| | -30 | -12 | -17 | 1 | -26 | 27 | -6 | 6 | 11 | 12 |
| | -7 | -1 | 25 | 32 | -17 | -13 | 0 | 15 | -14 | -13 |
| | 1 | 3 | 24 | 13 | 18 | 21 | 20 | -24 | -16 | 39 |
| | -20 | -7 | 7 | -5 | 19 | -8 | -21 | -8 | -12 | 10 |
| | 7 | 14 | -17 | 8 | -14 | -9 | 6 | -13 | 17 | -6 |
| | -27 | -15 | -20 | -1 | -25 | -13 | 2 | 54 | 14 | 30 |
| | -3 | -25 | 41 | 29 | -25 | 19 | -13 | -26 | -10 | -23 |
| | -43 | -30 | 33 | -4 | 5 | -1 | -32 | -1 | -9 | -32 |
| | -3 | -18 | 11 | 1 | -10 | 25 | 7 | -9 | | |
| 100 | -10 | 3 | 19 | 14 | 1 | -9 | 26 | -2 | -19 | -12 |
| | 7 | 9 | -8 | -8 | -11 | 8 | -11 | 7 | 28 | -12 |
| | 15 | -29 | -8 | 44 | -1 | -0 | -8 | 17 | -6 | 2 |
| | 0 | -4 | 9 | 5 | 7 | -5 | 3 | 10 | -12 | 30 |
| | -12 | 8 | 16 | 8 | 11 | -3 | 6 | 23 | 6 | -25 |
| | 18 | 16 | -31 | 2 | 9 | -8 | -8 | 7 | 20 | -16 |
| | -17 | 17 | -16 | 7 | -5 | 2 | 12 | 51 | 12 | 17 |
| | -3 | -19 | 18 | 59 | -11 | 3 | -29 | -19 | -42 | 1 |
| | -57 | -28 | 19 | 2 | 21 | 6 | -19 | -13 | -11 | -25 |
| | 10 | 9 | 22 | -38 | -3 | 25 | -33 | -10 | 34 | |

## Table E7

### Mean Percent Answering True
### and Standard Deviation on
### 300 JCES Items for 100 Colleges

| Item | Mean | S.D. | Item | Mean | S.D. | Item | Mean | S.D. |
|---|---|---|---|---|---|---|---|---|
| 1 | 83 | 7.6 | 44 | 48 | 14.3 | 87 | 41 | 13.6 |
| 2 | 38 | 17.1 | 45 | 61 | 12.9 | 88 | 10 | 8.8 |
| 3 | 56 | 26.0 | 46 | 55 | 21.2 | 89 | 19 | 12.1 |
| 4 | 33 | 9.4 | 47 | 56 | 18.2 | 90 | 54 | 15.1 |
| 5 | 57 | 17.2 | 48 | 27 | 17.7 | 91 | 76 | 9.0 |
| 6 | 67 | 10.1 | 49 | 33 | 21.6 | 92 | 64 | 8.8 |
| 7 | 74 | 13.1 | 50 | 75 | 11.2 | 93 | 47 | 15.6 |
| 8 | 37 | 11.2 | 51 | 32 | 9.3 | 94 | 65 | 11.7 |
| 9 | 52 | 10.1 | 52 | 32 | 20.7 | 95 | 36 | 13.6 |
| 10 | 28 | 7.7 | 53 | 53 | 27.5 | 96 | 59 | 10.8 |
| 11 | 77 | 11.0 | 54 | 35 | 10.8 | 97 | 56 | 9.9 |
| 12 | 82 | 12.8 | 55 | 45 | 15.9 | 98 | 86 | 5.2 |
| 13 | 55 | 16.3 | 56 | 73 | 8.0 | 99 | 24 | 8.8 |
| 14 | 70 | 8.6 | 57 | 91 | 4.7 | 100 | 39 | 13.1 |
| 15 | 61 | 18.8 | 58 | 48 | 12.1 | 101 | 81 | 6.0 |
| 16 | 69 | 11.3 | 59 | 63 | 8.8 | 102 | 78 | 8.0 |
| 17 | 47 | 11.3 | 60 | 49 | 21.2 | 103 | 75 | 9.6 |
| 18 | 53 | 9.3 | 61 | 43 | 11.1 | 104 | 75 | 9.2 |
| 19 | 50 | 10.4 | 62 | 8 | 5.3 | 105 | 64 | 9.6 |
| 20 | 31 | 14.4 | 63 | 81 | 11.9 | 106 | 39 | 11.6 |
| 21 | 28 | 24.3 | 64 | 30 | 8.6 | 107 | 53 | 12.6 |
| 22 | 57 | 10.9 | 65 | 39 | 14.0 | 108 | 35 | 14.1 |
| 23 | 63 | 10.9 | 66 | 35 | 11.2 | 109 | 61 | 18.8 |
| 24 | 28 | 13.5 | 67 | 60 | 16.5 | 110 | 78 | 9.3 |
| 25 | 66 | 13.9 | 68 | 37 | 13.0 | 111 | 59 | 7.6 |
| 26 | 60 | 29.2 | 69 | 19 | 12.0 | 112 | 71 | 7.1 |
| 27 | 35 | 13.6 | 70 | 36 | 10.8 | 113 | 70 | 7.5 |
| 28 | 49 | 17.5 | 71 | 54 | 14.9 | 114 | 77 | 7.6 |
| 29 | 73 | 10.3 | 72 | 81 | 8.5 | 115 | 79 | 6.5 |
| 30 | 56 | 11.9 | 73 | 47 | 12.2 | 116 | 36 | 7.8 |
| 31 | 52 | 22.7 | 74 | 72 | 20.1 | 117 | 64 | 8.3 |
| 32 | 27 | 14.5 | 75 | 54 | 10.8 | 118 | 40 | 9.3 |
| 33 | 54 | 11.9 | 76 | 66 | 11.4 | 119 | 53 | 12.9 |
| 34 | 18 | 14.5 | 77 | 21 | 20.6 | 120 | 36 | 9.9 |
| 35 | 66 | 9.1 | 78 | 52 | 14.8 | 121 | 63 | 13.2 |
| 36 | 23 | 16.4 | 79 | 35 | 11.3 | 122 | 88 | 5.4 |
| 37 | 74 | 7.7 | 80 | 71 | 11.0 | 123 | 76 | 8.0 |
| 38 | 33 | 13.2 | 81 | 48 | 10.9 | 124 | 52 | 15.4 |
| 39 | 27 | 12.7 | 82 | 41 | 21.9 | 125 | 15 | 5.7 |
| 40 | 42 | 11.9 | 83 | 28 | 8.0 | 126 | 46 | 23.4 |
| 41 | 45 | 20.3 | 84 | 47 | 8.8 | 127 | 45 | 17.3 |
| 42 | 85 | 11.9 | 85 | 18 | 13.1 | 128 | 64 | 10.8 |
| 43 | 38 | 8.4 | 86 | 56 | 10.0 | 129 | 64 | 11.9 |

Table E7 Continued

| Item | Mean | S.D. | Item | Mean | S.D. | Item | Mean | S.D. |
|---|---|---|---|---|---|---|---|---|
| 130 | 74 | 9.7 | 178 | 41 | 13.7 | 226 | 55 | 11.1 |
| 131 | 44 | 11.4 | 179 | 28 | 9.9 | 227 | 66 | 11.2 |
| 132 | 61 | 6.6 | 180 | 43 | 10.2 | 228 | 17 | 14.1 |
| 133 | 56 | 11.0 | 181 | 37 | 9.8 | 229 | 33 | 7.5 |
| 134 | 19 | 8.4 | 182 | 64 | 8.1 | 230 | 68 | 12.2 |
| 135 | 51 | 15.2 | 183 | 44 | 13.8 | 231 | 25 | 11.5 |
| 136 | 73 | 8.3 | 184 | 40 | 14.3 | 232 | 24 | 10.4 |
| 137 | 53 | 9.2 | 185 | 50 | 8.6 | 233 | 54 | 10.8 |
| 138 | 38 | 10.5 | 186 | 63 | 7.9 | 234 | 44 | 10.2 |
| 139 | 52 | 8.3 | 187 | 46 | 13.3 | 235 | 49 | 8.9 |
| 140 | 28 | 14.6 | 188 | 58 | 9.6 | 236 | 18 | 11.0 |
| 141 | 77 | 7.4 | 189 | 61 | 11.6 | 237 | 11 | 6.5 |
| 142 | 82 | 6.5 | 190 | 46 | 9.7 | 238 | 41 | 10.3 |
| 143 | 71 | 13.4 | 191 | 22 | 8.9 | 239 | 40 | 11.7 |
| 144 | 69 | 13.0 | 192 | 72 | 13.2 | 240 | 65 | 8.5 |
| 145 | 56 | 10.2 | 193 | 73 | 11.5 | 241 | 32 | 9.7 |
| 146 | 73 | 6.8 | 194 | 74 | 8.1 | 242 | 43 | 13.2 |
| 147 | 77 | 7.8 | 195 | 80 | 7.3 | 243 | 52 | 13.3 |
| 148 | 70 | 6.6 | 196 | 76 | 12.3 | 244 | 67 | 10.6 |
| 149 | 76 | 6.5 | 197 | 55 | 10.3 | 245 | 41 | 7.3 |
| 150 | 25 | 24.4 | 198 | 77 | 7.2 | 246 | 57 | 11.7 |
| 151 | 70 | 6.6 | 199 | 75 | 6.9 | 247 | 67 | 9.6 |
| 152 | 56 | 10.5 | 200 | 33 | 9.7 | 248 | 60 | 8.7 |
| 153 | 65 | 8.3 | 201 | 55 | 14.7 | 249 | 27 | 8.3 |
| 154 | 34 | 8.7 | 202 | 59 | 16.0 | 250 | 62 | 11.9 |
| 155 | 83 | 13.0 | 203 | 80 | 5.0 | 251 | 57 | 8.2 |
| 156 | 67 | 7.7 | 204 | 56 | 15.9 | 252 | 42 | 16.1 |
| 157 | 36 | 7.6 | 205 | 49 | 10.9 | 253 | 61 | 9.4 |
| 158 | 50 | 8.3 | 206 | 47 | 13.6 | 254 | 57 | 9.9 |
| 159 | 50 | 9.5 | 207 | 66 | 7.2 | 255 | 59 | 12.7 |
| 160 | 74 | 7.6 | 208 | 73 | 11.6 | 256 | 57 | 18.8 |
| 161 | 63 | 9.1 | 209 | 73 | 9.3 | 257 | 66 | 11.7 |
| 162 | 30 | 10.7 | 210 | 26 | 10.0 | 258 | 40 | 14.1 |
| 163 | 88 | 8.4 | 211 | 30 | 8.6 | 259 | 36 | 10.2 |
| 164 | 54 | 8.8 | 212 | 37 | 14.2 | 260 | 75 | 7.4 |
| 165 | 77 | 7.4 | 213 | 55 | 7.6 | 261 | 56 | 9.6 |
| 166 | 54 | 10.9 | 214 | 41 | 10.2 | 262 | 68 | 8.4 |
| 167 | 61 | 11.0 | 215 | 45 | 11.0 | 263 | 30 | 8.6 |
| 168 | 72 | 7.8 | 216 | 40 | 8.9 | 264 | 42 | 9.4 |
| 169 | 53 | 8.3 | 217 | 42 | 14.8 | 265 | 35 | 9.5 |
| 170 | 28 | 7.9 | 218 | 37 | 7.4 | 266 | 57 | 10.0 |
| 171 | 46 | 9.7 | 219 | 23 | 8.0 | 267 | 50 | 9.3 |
| 172 | 34 | 8.6 | 220 | 32 | 8.0 | 268 | 37 | 9.4 |
| 173 | 28 | 11.1 | 221 | 58 | 12.8 | 269 | 54 | 6.5 |
| 174 | 64 | 8.9 | 222 | 74 | 11.8 | 270 | 54 | 10.9 |
| 175 | 68 | 8.7 | 223 | 44 | 12.9 | 271 | 66 | 8.4 |
| 176 | 49 | 16.8 | 224 | 61 | 10.6 | 272 | 45 | 9.5 |
| 177 | 41 | 11.7 | 225 | 45 | 13.0 | 273 | 41 | 14.7 |

Table E7 Continued

| Item | Mean | S.D. | Item | Mean | S.D. | Item | Mean | S.D. |
|---|---|---|---|---|---|---|---|---|
| 274 | 58 | 11.1 | 283 | 53 | 16.7 | 292 | 40 | 7.2 |
| 275 | 61 | 8.4 | 284 | 53 | 8.4 | 293 | 47 | 8.0 |
| 276 | 77 | 9.2 | 285 | 49 | 15.0 | 294 | 47 | 16.2 |
| 277 | 72 | 8.6 | 286 | 45 | 10.1 | 295 | 71 | 8.3 |
| 278 | 17 | 8.1 | 287 | 69 | 7.2 | 296 | 16 | 5.7 |
| 279 | 64 | 7.1 | 288 | 55 | 7.7 | 297 | 39 | 8.1 |
| 280 | 71 | 9.6 | 289 | 56 | 12.0 | 298 | 51 | 7.6 |
| 281 | 34 | 12.8 | 290 | 64 | 8.5 | 299 | 41 | 10.7 |
| 282 | 18 | 5.8 | 291 | 19 | 7.6 | 300 | 76 | 7.5 |

# Appendix F

## Analysis of SPS Data

The analysis used for discovering the basic dimensions of the Junior College Environment Scales was adapted for analysis of the Student Preference Scales with the following major differences. Since the appropriate unit for analysis is the student rather than the college, the scales were developed from a sub-sample of the SPS respondents. (For final analyses, it is noted elsewhere that mean scale scores were attributed to each college, since the college is the final unit of analysis. For instrument development, individual students were used since the instrument basically allowed students to describe their own attributes rather than the attributes of a college environment.) In order to select the sub-sample of students a sub-sample of colleges was selected. A random number table was used to select the colleges. If an even number was associated with a college it was included and if an odd number was selected for a college it was excluded. This resulted in the selection of 45 colleges. The computer was then instructed to select every fourth respondent within a college. This resulted in the sample of 977 cases which was assumed to be sufficient for the analyses.

The items were separated into three sets. The correlation matrices for these three sets of ttems are reported in Tables F4, F5, and F6. Principal component-varimax analyses were performed on each set. Only factors with eigenvalues equal to or greater than 2.0 were used since a large number of vectors with eigenvalues slightly greater than 1.0 were not difined by enough items to permit their description. Factor scores were computed for each case and correlated with the item score. The correlation of all items with these three sets of factors are recorded in Tables F1, F2, and F3.

As with the JCES analysis this permitted the matching of factors across the three batteries of items and the selection of items which best define a given dimension. In order to further purify the dimensions each set of items was subjected to principal component-varimax analysis twice. A higher loading was required for an item to be retained (I.40 or greater) which was significant at the one percent level. (Harmon, 1960).

Item analyses described in Appendix J and elsewhere were performed on another sample of 1,000 students selected by choosing the first ten respondents from each of the 100 colleges. (Students were randomly arranged within colleges.) This provided "cross validation" to some extent.

Table F7 reports the mean and standard deviation of each of the 300 items for the original sample of 977 students.

## Table F1

Correlation of all SPS Item
Scores and Factor Scores from
Principal Component-Varimax
Analysis of Items, 1, 4, 7, ---, 298.

| | Factor | | | |
|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 |
| 1 | 33 | 29 | 15 | 37 |
| 2 | 18 | 35 | 25 | 38 |
| 3 | 17 | 21 | 12 | 26 |
| 4 | 24 | -31 | -13 | -20 |
| 5 | 16 | 24 | 19 | 31 |
| 6 | 39 | 11 | 5 | 17 |
| 7 | 23 | 28 | 13 | 32 |
| 8 | 19 | -27 | -12 | -20 |
| 9 | 14 | 19 | 6 | 23 |
| 10 | 29 | -20 | - 2 | -11 |
| 11 | 23 | 30 | 30 | 40 |
| 12 | 16 | 11 | 15 | 17 |
| 13 | 37 | -12 | 10 | 1 |
| 14 | 13 | 28 | 29 | 33 |
| 15 | 25 | 34 | 31 | 43 |
| 16 | 30 | 30 | 26 | 40 |
| 17 | 14 | 35 | 38 | 43 |
| 18 | 25 | 30 | 37 | 42 |
| 19 | 34 | 8 | 21 | 20 |
| 20 | 28 | 31 | 33 | 43 |
| 21 | 29 | 6 | 7 | 12 |
| 22 | 26 | -31 | -12 | -19 |
| 23 | 21 | 42 | 28 | 48 |
| 24 | 39 | 24 | 19 | 33 |
| 25 | 22 | 39 | 28 | 49 |
| 26 | 37 | 2 | 5 | 11 |
| 27 | 22 | 44 | 26 | 48 |
| 28 | 15 | 33 | 21 | 42 |
| 29 | 23 | 41 | 29 | 49 |
| 30 | 10 | -19 | - 2 | -11 |
| 31 | 23 | 39 | 42 | 50 |
| 32 | 32 | 26 | 35 | 39 |
| 33 | 15 | 38 | 28 | 43 |
| 34 | 30 | 38 | 40 | 49 |
| 35 | 13 | 30 | 33 | 36 |
| 36 | 25 | 31 | 35 | 42 |
| 37 | 10 | 20 | 20 | 27 |
| 38 | 20 | 40 | 34 | 46 |
| 39 | 25 | 32 | 44 | 41 |
| 40 | 5 | 4 | 10 | 12 |
| 41 | 31 | 21 | 24 | 31 |
| 42 | 46 | 22 | 17 | 28 |

## Table F1 Continued

| | Factor | | | |
|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 |
| 43 | 19 | -18 | 8 | - 5 |
| 44 | 44 | 1 | 13 | 14 |
| 45 | 37 | 27 | 23 | 34 |
| 46 | 44 | 15 | 15 | 22 |
| 47 | 39 | 30 | 23 | 39 |
| 48 | 48 | 8 | 12 | 17 |
| 49 | - 1 | -10 | -13 | - 6 |
| 50 | 38 | 45 | 32 | 51 |
| 51 | 10 | 11 | 17 | 19 |
| 52 | 48 | - 4 | 10 | 5 |
| 53 | 29 | 16 | 4 | 24 |
| 54 | 19 | 17 | 11 | 22 |
| 55 | 36 | 29 | 28 | 36 |
| 56 | 32 | 4 | 6 | 13 |
| 57 | 44 | 20 | 18 | 29 |
| 58 | 44 | - 0 | 15 | 12 |
| 59 | 29 | 30 | 22 | 35 |
| 60 | 44 | 20 | 18 | 29 |
| 61 | 38 | 21 | 43 | 36 |
| 62 | 24 | 23 | 33 | 33 |
| 63 | 22 | 47 | 37 | 54 |
| 64 | 21 | 28 | 23 | 35 |
| 65 | 17 | 52q | 38 | 58 |
| 66 | 12 | 25 | 27 | 34 |
| 67 | 19 | 39 | 30 | 48 |
| 68 | 15 | - 8 | 2 | 0 |
| 69 | 9 | 34 | 29 | 38 |
| 70 | 33 | 23 | 37 | 35 |
| 71 | 23 | 43 | 25 | 48 |
| 72 | 12 | 5 | - 3 | 10 |
| 73 | 48 | 23 | 14 | 35 |
| 74 | 23 | 38 | 25 | 46 |
| 75 | 12 | -14 | 1 | - 6 |
| 76 | 31 | 33 | 16 | 39 |
| 77 | 36 | 4 | 4 | 9 |
| 78 | 18 | 45 | 28 | 50 |
| 79 | 39 | 25 | 19 | 35 |
| 80 | 24 | 48 | 29 | 51 |
| 81 | 29 | 20 | 33 | 32 |
| 82 | 18 | 53 | 48 | 61 |
| 83 | 9 | 26 | 29 | 34 |
| 84 | 19 | -21 | -16 | -17 |
| 85 | 19 | 40 | 42 | 47 |
| 86 | 14 | 41 | 38 | 45 |
| 87 | 19 | 50 | 44 | 55 |
| 88 | - 1 | 2 | 8 | 9 |
| 89 | 10 | 26 | 35 | 34 |

Table F1 Continued

| Item | Factor<br>1 | <br>2 | <br>3 | <br>4 |
|---|---|---|---|---|
| 90 | -16 | 2 | - 1 | 4 |
| 91 | 35 | 11 | - 3 | 19 |
| 92 | 28 | 39 | 39 | 47 |
| 93 | 41 | 4 | 9 | 13 |
| 94 | 47 | 33 | 16 | 39 |
| 95 | 29 | -10 | - 3 | 1 |
| 96 | 47 | 12 | 7 | 22 |
| 97 | 30 | 19 | 11 | 26 |
| 98 | 13 | 20 | 15 | 21 |
| 99 | 4 | -31 | -14 | -24 |
| 100 | -19 | -23 | -18 | -19 |
| 101 | 29 | 41 | 26 | 46 |
| 102 | 26 | 41 | 27 | 47 |
| 103 | 29 | 19 | 23 | 31 |
| 104 | 36 | 29 | 29 | 42 |
| 105 | 33 | 31 | 23 | 42 |
| 106 | 34 | 6 | 21 | 18 |
| 107 | 23 | 48 | 30 | 49 |
| 108 | 22 | -23 | - 7 | -13 |
| 109 | 40 | - 8 | 6 | 1 |
| 110 | 27 | 27 | 19 | 34 |
| 111 | 19 | 12 | 2 | 16 |
| 112 | 25 | 27 | 41 | 44 |
| 113 | 21 | 26 | 32 | 37 |
| 114 | 31 | 7 | 28 | 20 |
| 115 | 19 | 31 | 31 | 46 |
| 116 | 16 | 1 | 24 | 16 |
| 117 | 20 | 23 | 32 | 34 |
| 118 | 13 | 36 | 42 | 46 |
| 119 | 22 | 34 | 38 | 48 |
| 120 | 12 | -34 | -20 | -24 |
| 121 | 27 | 35 | 31 | 44 |
| 122 | 18 | 49 | 32 | 34 |
| 123 | 31 | 44 | 23 | 32 |
| 124 | 19 | - 6 | 13 | 3 |
| 125 | 18 | 7 | 20 | 20 |
| 126 | 21 | 42 | 33 | 48 |
| 127 | 21 | -12 | 3 | 2 |
| 128 | 28 | 36 | 36 | 46 |
| 129 | 28 | 25 | 26 | 33 |
| 130 | 41 | 36 | 33 | 30 |
| 131 | 27 | 29 | 35 | 43 |
| 132 | 4 | 8 | 9 | 13 |
| 133 | 20 | 38 | 48 | 34 |
| 134 | 12 | 33 | 35 | 46 |
| 135 | 18 | -26 | -20 | -16 |

**Table F1 Continued**

| | Factor | | | |
|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 |
| 136 | 24 | 38 | 48 | 54 |
| 137 | 30 | 29 | 42 | 45 |
| 138 | 9 | 4 | 31 | 19 |
| 139 | 10 | 18 | 26 | 31 |
| 140 | 23 | 43 | 49 | 54 |
| 141 | 32 | 35 | 22 | 44 |
| 142 | 16 | 35 | 26 | 44 |
| 143 | 42 | 21 | 19 | 37 |
| 144 | 35 | 7 | 18 | 22 |
| 145 | 33 | 27 | 25 | 40 |
| 146 | 38 | 1 | 2 | 13 |
| 147 | 36 | 32 | 24 | 41 |
| 148 | 14 | 49 | 31 | 56 |
| 149 | 20 | 26 | 12 | 32 |
| 150 | 23 | 28 | 26 | 36 |
| 151 | 27 | 8 | - 2 | 16 |
| 152 | 32 | 12 | 14 | 23 |
| 153 | 34 | 17 | 27 | 35 |
| 154 | 23 | -37 | -15 | -16 |
| 155 | 25 | 31 | 27 | 40 |
| 156 | 19 | 27 | 21 | 35 |
| 157 | 10 | - 6 | 30 | 15 |
| 158 | 25 | -17 | - 5 | - 1 |
| 159 | - 1 | - 8 | - 6 | - 4 |
| 160 | 20 | 40 | 47 | 54 |
| 161 | 25 | 34 | 49 | 48 |
| 162 | 7 | -19 | 4 | - 2 |
| 163 | 48 | 7 | 14 | 22 |
| 164 | 17 | - 9 | -10 | 2 |
| 165 | 25 | 35 | 41 | 49 |
| 166 | 32 | 26 | 50 | 50 |
| 167 | 9 | -15 | - 8 | - 3 |
| 168 | 33 | 27 | 36 | 44 |
| 169 | 24 | - 8 | - 5 | 7 |
| 170 | 9 | -23 | -15 | -12 |
| 171 | 12 | -23 | - 5 | - 8 |
| 172 | 10 | -29 | -11 | -13 |
| 173 | 27 | 24 | 30 | 35 |
| 174 | 22 | 40 | 33 | 50 |
| 175 | 38 | 37 | 35 | 52 |
| 176 | 21 | 36 | 26 | 44 |
| 177 | 27 | 6 | 12 | 17 |
| 178 | 23 | 43 | 49 | 54 |
| 179 | 22 | 10 | 22 | 21 |
| 180 | 29 | 34 | 40 | 45 |
| 181 | 34 | 36 | 47 | 54 |

Table F1 Continued

| Item | Factor<br>1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 182 | 22 | 42 | 47 | 54 |
| 183 | 15 | 32 | 41 | 43 |
| 184 | 23 | 39 | 55 | 54 |
| 185 | 18 | -16 | - 3 | - 3 |
| 186 | 12 | 25 | 26 | 33 |
| 187 | 27 | 48 | 53 | 61 |
| 188 | 20 | 23 | 35 | 36 |
| 189 | 25 | 31 | 45 | 45 |
| 190 | 35 | 23 | 40 | 40 |
| 191 | 18 | 8 | 24 | 25 |
| 192 | 33 | 17 | 17 | 29 |
| 193 | 23 | 39 | 31 | 50 |
| 194 | 19 | - 6 | - 6 | 3 |
| 195 | 29 | 44 | 39 | 55 |
| 196 | 37 | 21 | 20 | 36 |
| 197 | 25 | 1 | 10 | 9 |
| 198 | 18 | 50 | 34 | 43 |
| 199 | 47 | 40 | 30 | 40 |
| 200 | 20 | 21 | 10 | 19 |
| 201 | 14 | -20 | 1 | -11 |
| 202 | 33 | 39 | 34 | 35 |
| 203 | 19 | 1 | 1 | 5 |
| 204 | 9 | - 4 | - 5 | - 1 |
| 205 | 17 | 57 | 30 | 44 |
| 206 | 20 | 56 | 34 | 45 |
| 207 | 21 | 9 | 16 | 12 |
| 208 | 12 | 10 | 9 | 12 |
| 209 | 21 | 25 | 23 | 27 |
| 210 | - 6 | -13 | - 2 | -10 |
| 211 | 19 | 17 | 36 | 15 |
| 212 | 24 | 36 | 42 | 33 |
| 213 | 19 | 36 | 38 | 34 |
| 214 | 27 | 60 | 51 | 52 |
| 215 | 7 | -22 | -11 | -19 |
| 216 | 14 | 26 | 37 | 22 |
| 217 | 21 | 29 | 45 | 27 |
| 218 | 26 | 9 | 28 | 14 |
| 219 | 13 | -21 | - 5 | -14 |
| 220 | 17 | 31 | 51 | 29 |
| 221 | 16 | 44 | 35 | 33 |
| 222 | - 3 | 13 | 8 | 8 |
| 223 | 24 | 62 | 41 | 45 |
| 224 | 32 | 53 | 38 | 42 |
| 225 | 25 | 56 | 44 | 46 |
| 226 | 12 | 49 | 31 | 37 |
| 227 | 13 | 13 | 17 | 11 |
| 228 | 16 | 26 | 24 | 17 |

Table F1 Continued

| | Factor | | | |
|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 |
| 229 | 33 | 31 | 31 | 22 |
| 230 | 11 | 41 | 23 | 30 |
| 231 | 8 | 34 | 36 | 23 |
| 232 | 22 | 48 | 56 | 38 |
| 233 | 13 | 50 | 51 | 39 |
| 234 | 16 | 42 | 48 | 34 |
| 235 | 23 | 57 | 56 | 44 |
| 236 | 11 | 44 | 46 | 33 |
| 237 | 8 | 30 | 41 | 21 |
| 238 | 23 | 54 | 57 | 41 |
| 239 | 12 | 47 | 52 | 37 |
| 240 | 16 | 49 | 46 | 37 |
| 241 | - 7 | -11 | 8 | -11 |
| 242 | - 1 | 10 | 10 | 1 |
| 243 | 18 | 39 | 30 | 26 |
| 244 | 26 | 20 | 8 | 9 |
| 245 | 22 | 19 | 23 | 15 |
| 246 | 16 | 55 | 39 | 40 |
| 247 | 7 | 53 | 26 | 35 |
| 248 | - 2 | - 0 | 3 | - 5 |
| 249 | - 1 | - 8 | - 6 | - 4 |
| 250 | 0 | 3 | 13 | - 5 |
| 251 | 13 | 3 | 12 | - 1 |
| 252 | 6 | 37 | 20 | 22 |
| 253 | 5 | 24 | 15 | 11 |
| 254 | 24 | 27 | 29 | 20 |
| 255 | 21 | 43 | 35 | 31 |
| 256 | 16 | 45 | 27 | 29 |
| 257 | 28 | 49 | 32 | 37 |
| 258 | 15 | 48 | 38 | 33 |
| 259 | 18 | - 8 | 7 | - 9 |
| 260 | 21 | 14 | 13 | 8 |
| 261 | 21 | 51 | 48 | 39 |
| 262 | 25 | 52 | 54 | 38 |
| 263 | 18 | 35 | 42 | 27 |
| 264 | 16 | 14 | 30 | 8 |
| 265 | 5 | -13 | 0 | -15 |
| 266 | - 1 | - 6 | - 3 | -13 |
| 267 | 16 | 38 | 40 | 27 |
| 268 | 15 | 26 | 42 | 15 |
| 269 | 12 | 11 | 13 | 0 |
| 270 | 19 | 51 | 46 | 35 |
| 271 | 11 | 52 | 31 | 32 |
| 272 | 19 | 49 | 45 | 35 |
| 273 | 17 | 51 | 43 | 37 |
| 274 | 23 | 57 | 34 | 39 |
| 275 | 5 | 48 | 32 | 31 |

### Table F1 Continued

| | Factor | | | |
|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 |
| 276 | 4 | 47 | 29 | 29 |
| 277 | 11 | 41 | 31 | 28 |
| 278 | 15 | 27 | 35 | 19 |
| 279 | 11 | - 1 | 7 | - 4 |
| 280 | 6 | 47 | 35 | 28 |
| 281 | 11 | 43 | 46 | 32 |
| 282 | 12 | 26 | 38 | 17 |
| 283 | 14 | 49 | 50 | 35 |
| 284 | 8 | - 3 | - 0 | -10 |
| 285 | 17 | 50 | 46 | 36 |
| 286 | 7 | 43 | 48 | 28 |
| 287 | 12 | 41 | 41 | 28 |
| 288 | 10 | 6 | 8 | - 1 |
| 289 | 4 | -10 | - 3 | -13 |
| 290 | 9 | - 3 | 5 | - 6 |
| 291 | - 6 | 17 | 15 | 5 |
| 292 | - 1 | - 8 | 2 | -14 |
| 293 | - 1 | -13 | 2 | -16 |
| 294 | 1 | 13 | 16 | 3 |
| 295 | 28 | 52 | 33 | 34 |
| 296 | 15 | 7 | 20 | 0 |
| 297 | - 2 | - 9 | 5 | -10 |
| 298 | 2 | -14 | 5 | -14 |
| 299 | 23 | 12 | 21 | 10 |
| 300 | - 8 | 10 | 16 | 2 |

## Table F2

### Correlation of all SPS Item Scores and Factor Scores from Principal Component-Varimax Analysis of Items 2, 5, 8, ---, 299.

| | Factor | | | | |
|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 |
| 1 | 38 | - 7 | 2 | 28 | 25 |
| 2 | 44 | - 6 | 13 | 40 | 16 |
| 3 | 31 | - 9 | - 3 | 26 | 13 |
| 4 | -17 | -13 | -35 | -14 | 15 |
| 5 | 36 | - 2 | 8 | 34 | 10 |
| 6 | 19 | -10 | -19 | 11 | 40 |
| 7 | 35 | - 4 | 4 | 26 | 20 |
| 8 | -23 | -14 | -34 | -18 | 18 |
| 9 | 33 | - 8 | - 5 | 24 | 9 |
| 10 | -10 | - 9 | -24 | - 4 | 14 |
| 11 | 37 | - 7 | 6 | 38 | 17 |
| 12 | 18 | - 8 | - 1 | 19 | 14 |
| 13 | - 4 | - 2 | -12 | 2 | 25 |
| 14 | 34 | 3 | 22 | 39 | 14 |
| 15 | 42 | 2 | 17 | 43 | 20 |
| 16 | 38 | - 5 | 8 | 35 | 23 |
| 17 | 47 | - 2 | 28 | 56 | 12 |
| 18 | 39 | - 4 | 16 | 45 | 24 |
| 19 | 16 | - 7 | - 5 | 22 | 24 |
| 20 | 42 | - 3 | 11 | 50 | 23 |
| 21 | 13 | - 5 | - 7 | 11 | 27 |
| 22 | -20 | - 5 | -32 | -18 | 18 |
| 23 | 57 | - 1 | 17 | 48 | 23 |
| 24 | 36 | - 8 | - 6 | 31 | 30 |
| 25 | 52 | - 6 | 10 | 47 | 19 |
| 26 | 13 | - 1 | -15 | 8 | 48 |
| 27 | 55 | - 8 | 15 | 46 | 23 |
| 28 | 44 | - 9 | 5 | 43 | 10 |
| 29 | 56 | - 1 | 15 | 50 | 23 |
| 30 | -13 | - 7 | -22 | - 7 | 3 |
| 31 | 45 | - 3 | 20 | 53 | 19 |
| 32 | 39 | -14 | 2 | 50 | 26 |
| 33 | 48 | - 4 | 18 | 48 | 14 |
| 34 | 47 | - 8 | 13 | 52 | 24 |
| 35 | 35 | - 4 | 21 | 45 | 9 |
| 36 | 41 | - 7 | 9 | 48 | 21 |
| 37 | 26 | - 1 | 12 | 28 | 13 |
| 38 | 53 | - 4 | 18 | 58 | 16 |
| 39 | 38 | - 7 | 24 | 51 | 20 |
| 40 | 11 | - 6 | - 3 | 19 | 2 |
| 41 | 33 | - 8 | - 1 | 33 | 42 |
| 42 | 29 | - 6 | - 7 | 17 | 48 |

### Table F2 Continued

| Item | Factor<br>1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 43 | - 6 | -19 | -20 | 4 | 12 |
| 44 | 14 | -11 | -21 | 14 | 55 |
| 45 | 36 | - 3 | 1 | 29 | 35 |
| 46 | 21 | 2 | - 3 | 16 | 41 |
| 47 | 47 | -10 | - 0 | 34 | 53 |
| 48 | 17 | -11 | -16 | 14 | 50 |
| 49 | 0 | - 7 | -16 | 1 | - 7 |
| 50 | 58 | - 8 | 11 | 43 | 40 |
| 51 | 22 | -13 | - 2 | 29 | 2 |
| 52 | 5 | - 9 | -18 | 2 | 38 |
| 53 | 31 | -18 | -26 | 16 | 24 |
| 54 | 30 | -17 | -12 | 25 | 17 |
| 55 | 36 | -13 | - 1 | 34 | 30 |
| 56 | 12 | - 8 | -16 | 8 | 39 |
| 57 | 28 | -11 | - 9 | 17 | 43 |
| 58 | 11 | -10 | -13 | 15 | 37 |
| 59 | 42 | -15 | - 4 | 30 | 31 |
| 60 | 30 | -12 | -15 | 21 | 45 |
| 61 | 31 | -11 | 1 | 38 | 29 |
| 62 | 34 | - 9 | 4 | 48 | 19 |
| 63 | 55 | - 4 | 19 | 50 | 18 |
| 64 | 35 | -10 | 3 | 34 | 16 |
| 65 | 62 | 1 | 23 | 57 | 13 |
| 66 | 33 | - 3 | 9 | 40 | 6 |
| 67 | 47 | - 1 | 16 | 43 | 18 |
| 68 | - 3 | - 2 | -10 | 5 | 16 |
| 69 | 42 | - 2 | 20 | 44 | 5 |
| 70 | 29 | - 6 | 7 | 37 | 24 |
| 71 | 58 | -12 | 5 | 42 | 18 |
| 72 | 15 | -12 | -18 | 9 | 3 |
| 73 | 33 | - 7 | - 8 | 25 | 43 |
| 74 | 55 | - 5 | 13 | 42 | 24 |
| 75 | - 8 | -13 | -19 | - 0 | 7 |
| 76 | 39 | -19 | - 1 | 29 | 24 |
| 77 | 8 | - 5 | -16 | 2 | 47 |
| 78 | 52 | -10 | 11 | 43 | 17 |
| 79 | 34 | -17 | -11 | 28 | 33 |
| 80 | 63 | -12 | 11 | 46 | 24 |
| 81 | 31 | -17 | 3 | 38 | 25 |
| 82 | 57 | - 3 | 30 | 62 | 15 |
| 83 | 33 | - 4 | 10 | 47 | 4 |
| 84 | -16 | -20 | -38 | -20 | 12 |
| 85 | 45 | -10 | 20 | 52 | 17 |
| 86 | 48 | -12 | 22 | 52 | 6 |
| 87 | 57 | - 9 | 27 | 58 | 13 |
| 88 | 9 | - 5 | - 2 | 21 | - 5 |
| 89 | 34 | -13 | 17 | 48 | 3 |

Table F2 Continued

| | Factor | | | | |
|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 |
| 90 | 6 | - 7 | - 1 | 11 | -21 |
| 91 | 18 | -14 | -21 | 6 | 32 |
| 92 | 46 | -18 | 18 | 50 | 27 |
| 93 | 9 | - 8 | -18 | 7 | 41 |
| 94 | 35 | -14 | - 6 | 22 | 41 |
| 95 | - 2 | -10 | -41 | - 4 | 30 |
| 96 | 19 | -13 | -26 | 10 | 43 |
| 97 | 24 | -12 | -16 | 16 | 42 |
| 98 | 22 | - 1 | 15 | 20 | 16 |
| 99 | -26 | - 8 | -31 | -17 | - 2 |
| 100 | -18 | -10 | -19 | - 9 | -24 |
| 101 | 51 | -11 | 4 | 38 | 22 |
| 102 | 49 | - 2 | 13 | 40 | 28 |
| 103 | 26 | - 7 | 3 | 25 | 22 |
| 104 | 39 | - 1 | 13 | 36 | 37 |
| 105 | 44 | -15 | - 5 | 32 | 29 |
| 106 | 13 | -14 | - 4 | 21 | 29 |
| 107 | 60 | -12 | 21 | 44 | 20 |
| 108 | -21 | -12 | -36 | -17 | 20 |
| 109 | - 3 | -10 | -23 | - 2 | 32 |
| 110 | 38 | -12 | 1 | 27 | 35 |
| 111 | 18 | -14 | -22 | 8 | 12 |
| 112 | 34 | - 8 | 9 | 37 | 23 |
| 113 | 35 | -10 | 13 | 42 | 20 |
| 114 | 10 | - 7 | - 2 | 20 | 30 |
| 115 | 40 | - 3 | 12 | 37 | 17 |
| 116 | 4 | - 3 | 5 | 25 | 22 |
| 117 | 31 | - 2 | 16 | 34 | 20 |
| 118 | 42 | - 6 | 23 | 49 | 12 |
| 119 | 45 | - 2 | 16 | 49 | 22 |
| 120 | -27 | -15 | -47 | -20 | 8 |
| 121 | 43 | - 9 | 8 | 40 | 31 |
| 122 | 62 | - 4 | 22 | 45 | 19 |
| 123 | 53 | - 6 | 15 | 43 | 32 |
| 124 | - 4 | - 8 | - 9 | 3 | 13 |
| 125 | 15 | - 5 | 1 | 35 | 22 |
| 126 | 49 | -15 | 12 | 44 | 16 |
| 127 | - 6 | - 7 | -20 | - 1 | 17 |
| 128 | 48 | -11 | 10 | 46 | 26 |
| 129 | 33 | -14 | - 7 | 31 | 23 |
| 130 | 45 | -17 | - 2 | 39 | 40 |
| 131 | 41 | - 8 | 0 | 47 | 30 |
| 132 | 15 | - 8 | -11 | 19 | 1 |
| 133 | 44 | - 1 | 17 | 50 | 20 |
| 134 | 46 | - 6 | 11 | 55 | 9 |
| 135 | -18 | -12 | -45 | -20 | 13 |

Table F2 Continued

| | Factor | | | | |
|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 |
| 136 | 45 | - 7 | 13 | 48 | 25 |
| 137 | 38 | -13 | 6 | 49 | 31 |
| 138 | 11 | -10 | 7 | 31 | 8 |
| 139 | 27 | -18 | - 3 | 35 | 5 |
| 140 | 49 | -13 | 20 | 60 | 16 |
| 141 | 44 | - 6 | - 2 | 33 | 29 |
| 142 | 41 | - 3 | 10 | 35 | 14 |
| 143 | 36 | -14 | -17 | 27 | 52 |
| 144 | 15 | -11 | -16 | 15 | 36 |
| 145 | 35 | - 7 | - 0 | 30 | 30 |
| 146 | 10 | -14 | -39 | 3 | 47 |
| 147 | 39 | -13 | - 4 | 30 | 36 |
| 148 | 57 | - 3 | 19 | 47 | 16 |
| 149 | 35 | - 9 | - 9 | 22 | 17 |
| 150 | 40 | - 5 | 5 | 39 | 26 |
| 151 | 15 | -11 | -23 | 7 | 23 |
| 152 | 20 | -13 | -23 | 17 | 39 |
| 153 | 30 | -20 | -19 | 30 | 33 |
| 154 | -21 | -17 | -51 | -18 | 19 |
| 155 | 43 | -16 | - 1 | 32 | 28 |
| 156 | 34 | -13 | - 6 | 30 | 15 |
| 157 | 8 | - 9 | -10 | 23 | 11 |
| 158 | - 7 | -10 | -40 | - 3 | 28 |
| 159 | - 4 | 1 | - 4 | - 3 | 1 |
| 160 | 44 | - 8 | 20 | 49 | 16 |
| 161 | 41 | - 6 | 22 | 53 | 28 |
| 162 | - 9 | -11 | -26 | 7 | 1 |
| 163 | 13 | -10 | -20 | 8 | 42 |
| 164 | 1 | -16 | -51 | - 3 | 14 |
| 165 | 38 | 1 | 15 | 42 | 23 |
| 166 | 34 | - 4 | 11 | 45 | 28 |
| 167 | - 5 | -16 | -48 | - 5 | - 3 |
| 168 | 35 | - 9 | - 2 | 38 | 32 |
| 169 | 0 | - 8 | -36 | - 1 | 21 |
| 170 | -14 | -16 | -61 | -13 | 0 |
| 171 | -14 | -16 | -40 | - 6 | 5 |
| 172 | -17 | -17 | -45 | -10 | 4 |
| 173 | 35 | -22 | -15 | 39 | 24 |
| 174 | 47 | - 7 | 4 | 41 | 18 |
| 175 | 46 | -14 | - 4 | 39 | 33 |
| 176 | 48 | -10 | - 6 | 39 | 20 |
| 177 | 15 | -19 | -30 | 17 | 26 |
| 178 | 46 | -15 | 9 | 48 | 21 |
| 179 | 17 | -22 | -30 | 27 | 18 |
| 180 | 41 | -17 | 0 | 43 | 28 |
| 181 | 43 | -16 | 3 | 47 | 25 |

Table F2 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 182 | 49 | -10 | 17 | 56 | 15 |
| 183 | 39 | - 8 | 11 | 48 | 11 |
| 184 | 44 | -13 | 17 | 53 | 18 |
| 185 | -11 | -18 | -51 | - 4 | 17 |
| 186 | 30 | -13 | - 3 | 33 | 4 |
| 187 | 53 | -12 | 15 | 55 | 22 |
| 188 | 31 | -14 | - 6 | 45 | 14 |
| 189 | 36 | -12 | 10 | 45 | 21 |
| 190 | 31 | -23 | - 7 | 36 | 31 |
| 191 | 19 | -14 | -23 | 33 | 16 |
| 192 | 22 | -14 | -15 | 17 | 33 |
| 193 | 43 | - 4 | 5 | 38 | 19 |
| 194 | 0 | -12 | -41 | - 7 | 21 |
| 195 | 51 | - 8 | 9 | 45 | 24 |
| 196 | 31 | -17 | -18 | 22 | 37 |
| 197 | 3 | -20 | -28 | 7 | 28 |
| 198 | 44 | - 9 | 22 | 37 | 13 |
| 199 | 36 | -20 | - 4 | 27 | 34 |
| 200 | 22 | -14 | - 8 | 13 | 19 |
| 201 | -16 | -16 | -26 | - 9 | 11 |
| 202 | 31 | -25 | 2 | 26 | 23 |
| 203 | 5 | -30 | -40 | - 3 | 15 |
| 204 | - 1 | -27 | -33 | - 6 | 3 |
| 205 | 46 | -14 | 21 | 37 | 8 |
| 206 | 53 | -13 | 27 | 40 | 13 |
| 207 | 10 | -23 | -16 | 12 | 19 |
| 208 | 12 | -29 | -15 | 11 | 3 |
| 209 | 32 | -23 | - 5 | 28 | 11 |
| 210 | - 9 | -27 | -23 | - 1 | -10 |
| 211 | 13 | -26 | 1 | 21 | 11 |
| 212 | 33 | -20 | 15 | 34 | 23 |
| 213 | 33 | -15 | 17 | 34 | 14 |
| 214 | 30 | -18 | 29 | 46 | 16 |
| 215 | -20 | -36 | -47 | -20 | 3 |
| 216 | 19 | -21 | 16 | 24 | 6 |
| 217 | 22 | -29 | 4 | 29 | 13 |
| 218 | 5 | -31 | -13 | 15 | 25 |
| 219 | -16 | -30 | -39 | -13 | 9 |
| 220 | 24 | -21 | 21 | 33 | 9 |
| 221 | 39 | -30 | 22 | 32 | 5 |
| 222 | 12 | -29 | - 8 | 10 | -12 |
| 223 | 48 | -23 | 26 | 37 | 14 |
| 224 | 45 | 33 | 17 | 32 | 25 |
| 225 | 30 | -25 | 25 | 43 | 19 |
| 226 | 41 | -25 | 17 | 34 | 1 |
| 227 | 14 | -36 | -10 | 15 | 11 |
| 228 | 20 | -35 | 4 | 19 | 13 |

Table F2 Continued

| | Factor | | | | |
|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 |
| 229 | 22 | -36 | - 1 | 20 | 25 |
| 230 | 38 | -36 | 10 | 27 | 0 |
| 231 | 26 | -31 | 17 | 30 | 2 |
| 232 | 37 | -32 | 23 | 41 | 13 |
| 233 | 41 | -29 | 40 | 43 | 4 |
| 234 | 31 | -31 | 23 | 33 | 7 |
| 235 | 42 | -31 | 29 | 44 | 17 |
| 236 | 32 | -36 | 36 | 39 | 3 |
| 237 | 22 | -26 | 19 | 30 | 6 |
| 238 | 41 | -36 | 31 | 42 | 17 |
| 239 | 36 | -29 | 38 | 41 | 16 |
| 240 | 38 | -29 | 30 | 37 | 14 |
| 241 | - 8 | -39 | -18 | - 0 | -10 |
| 242 | 6 | -44 | - 8 | 3 | -10 |
| 243 | 27 | -23 | 17 | 22 | 17 |
| 244 | 13 | -36 | -11 | 3 | 21 |
| 245 | 17 | -32 | -12 | 14 | 13 |
| 246 | 42 | -27 | 27 | 34 | 9 |
| 247 | 40 | -32 | 12 | 29 | - 2 |
| 248 | - 1 | -48 | -21 | - 0 | -13 |
| 249 | - 4 | 1 | - 4 | - 3 | 1 |
| 250 | - 2 | -49 | -16 | - 2 | - 1 |
| 251 | - 0 | -33 | -22 | - 2 | 12 |
| 252 | 31 | -42 | 2 | 21 | - 4 |
| 253 | 17 | -31 | - 9 | 12 | - 1 |
| 254 | 19 | -30 | - 3 | 18 | 19 |
| 255 | 33 | -43 | 11 | 27 | 13 |
| 256 | 33 | -38 | 3 | 23 | 7 |
| 257 | 42 | -38 | 14 | 23 | 18 |
| 258 | 38 | -42 | 22 | 31 | 9 |
| 259 | - 6 | -38 | -31 | - 6 | 11 |
| 260 | 12 | -31 | -19 | 2 | 13 |
| 261 | 40 | -33 | 23 | 37 | 13 |
| 262 | 33 | -42 | 20 | 34 | 13 |
| 263 | 27 | -43 | 21 | 30 | 13 |
| 264 | 8 | -43 | - 1 | 13 | 13 |
| 265 | -12 | -38 | -32 | -12 | 4 |
| 266 | - 9 | -53 | -30 | -16 | -10 |
| 267 | 23 | -40 | 16 | 23 | 13 |
| 268 | -14 | -46 | 9 | 20 | 8 |
| 269 | 4 | -36 | -13 | - 1 | 11 |
| 270 | 36 | -37 | 27 | 32 | 13 |
| 271 | 36 | -44 | 12 | 27 | - 1 |
| 272 | 39 | -48 | 21 | 33 | 10 |
| 273 | 40 | -42 | 21 | 36 | 16 |
| 274 | 44 | -41 | 16 | 33 | 17 |
| 275 | 38 | -44 | 17 | 30 | - 6 |

Table F2 Continued

| | Factor | | | | |
|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 |
| 276 | 35 | -22 | 24 | 23 | 3 |
| 277 | 30 | -41 | 7 | 23 | 7 |
| 278 | 19 | -58 | - 0 | 25 | 10 |
| 279 | - 2 | -53 | -28 | - 5 | 4 |
| 280 | 31 | -34 | 22 | 26 | 3 |
| 281 | 33 | -49 | 24 | 39 | 5 |
| 282 | 15 | -51 | 5 | 22 | 9 |
| 283 | 36 | -38 | 23 | 34 | 8 |
| 284 | - 6 | -57 | -29 | -13 | 5 |
| 285 | 38 | -37 | 24 | 35 | 12 |
| 286 | 28 | -45 | 22 | 29 | 7 |
| 287 | 29 | -42 | 25 | 28 | 9 |
| 288 | 2 | -54 | -21 | - 2 | 7 |
| 289 | -10 | -54 | -32 | -13 | 0 |
| 290 | - 8 | -59 | -34 | -11 | 9 |
| 291 | 9 | -42 | - 0 | 11 | -11 |
| 292 | -12 | -50 | -23 | -11 | - 2 |
| 293 | -14 | -59 | -29 | -12 | - 6 |
| 294 | 6 | -53 | -10 | 5 | - 5 |
| 295 | 36 | -38 | 12 | 23 | 17 |
| 296 | - 0 | -56 | - 9 | 3 | 15 |
| 297 | - 9 | -52 | -23 | - 3 | - 3 |
| 298 | -14 | -57 | -32 | -11 | 1 |
| 299 | 7 | -48 | - 9 | 5 | 25 |
| 300 | 6 | -40 | - 2 | 6 | -13 |

### Table F3

### Correlation of all SPS Item Scores and Factor Scores from Principal Component-Varimax Analysis of Items 3, 6, 9, ---, 300

| Item | Factor<br>1 | <br>2 | <br>3 | <br>4 | <br>5 |
|---|---|---|---|---|---|
| 1 | 27 | - 0 | 34 | 20 | 34 |
| 2 | 34 | - 3 | 19 | 28 | 42 |
| 3 | 19 | -10 | 19 | 14 | 35 |
| 4 | -25 | -21 | 9 | - 5 | -12 |
| 5 | 24 | - 1 | 19 | 25 | 35 |
| 6 | 12 | - 5 | 50 | 12 | 16 |
| 7 | 24 | - 0 | 28 | 18 | 33 |
| 8 | -25 | -19 | 8 | - 6 | -17 |
| 9 | 18 | -12 | 19 | 11 | 40 |
| 10 | -15 | -13 | - 11 | 4 | - 6 |
| 11 | 30 | - 4 | 21 | 36 | 39 |
| 12 | 13 | -12 | 17 | 24 | 22 |
| 13 | - 7 | - 2 | 21 | 14 | - 4 |
| 14 | 29 | 5 | 13 | 31 | 33 |
| 15 | 37 | 7 | 19 | 42 | 45 |
| 16 | 29 | - 2 | 27 | 32 | 37 |
| 17 | 39 | 4 | 9 | 45 | 48 |
| 18 | 33 | - 1 | 20 | 50 | 42 |
| 19 | 11 | - 8 | 23 | 31 | 19 |
| 20 | 33 | - 2 | 23 | 44 | 44 |
| 21 | 7 | - 3 | 33 | 18 | 13 |
| 22 | -26 | - 9 | 15 | - 4 | -17 |
| 23 | 42 | 7 | 27 | 35 | 49 |
| 24 | 25 | - 9 | 39 | 29 | 39 |
| 25 | 37 | - 6 | 20 | 36 | 52 |
| 26 | 4 | 2 | 35 | 15 | 9 |
| 27 | 46 | - 3 | 27 | 32 | 57 |
| 28 | 30 | - 8 | 16 | 30 | 47 |
| 29 | 42 | 5 | 28 | 34 | 51 |
| 30 | -19 | -14 | - 1 | 5 | - 9 |
| 31 | 38 | 0 | 16 | 48 | 47 |
| 32 | 29 | -13 | 22 | 43 | 42 |
| 33 | 37 | 0 | 10 | 37 | 54 |
| 34 | 39 | - 5 | 24 | 50 | 51 |
| 35 | 30 | - 4 | 8 | 36 | 37 |
| 36 | 31 | - 6 | 22 | 51 | 49 |
| 37 | 22 | 2 | 13 | 26 | 25 |
| 38 | 41 | - 1 | 20 | 45 | 52 |
| 39 | 37 | - 5 | 12 | 58 | 43 |
| 40 | 3 | -12 | - 5 | 19 | 18 |
| 41 | 26 | - 4 | 29 | 32 | 33 |
| 42 | 26 | 6 | 54 | 19 | 21 |

## Table F3 Continued

| Item | Factor<br>1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 43 | -14 | -26 | 2 | 13 | - 1 |
| 44 | 7 | - 7 | 39 | 23 | 13 |
| 45 | 28 | 6 | 45 | 29 | 33 |
| 46 | 18 | 12 | 39 | 21 | 17 |
| 47 | 34 | - 2 | 45 | 31 | 40 |
| 48 | 11 | - 4 | 50 | 26 | 14 |
| 49 | -11 | -18 | - 9 | - 2 | 6 |
| 50 | 47 | 1 | 45 | 35 | 49 |
| 51 | 10 | -18 | 2 | 28 | 28 |
| 52 | - 0 | - 5 | 34 | 13 | 2 |
| 53 | 14 | -15 | 32 | 13 | 30 |
| 54 | 19 | -21 | 20 | 18 | 39 |
| 55 | 27 | - 8 | 28 | 30 | 35 |
| 56 | 5 | - 5 | 27 | 14 | 10 |
| 57 | 24 | - 2 | 56 | 22 | 23 |
| 58 | 2 | -10 | 30 | 22 | 11 |
| 59 | 29 | - 7 | 32 | 23 | 37 |
| 60 | 22 | - 9 | 51 | 28 | 29 |
| 61 | 23 | - 8 | 25 | 42 | 32 |
| 62 | 24 | - 8 | 14 | 39 | 37 |
| 63 | 50 | 4 | 24 | 42 | 56 |
| 64 | 28 | -11 | 18 | 30 | 39 |
| 65 | 51 | 7 | 20 | 39 | 59 |
| 66 | 25 | - 4 | 6 | 38 | 39 |
| 67 | 40 | 6 | 22 | 33 | 45 |
| 68 | - 8 | - 5 | 5 | 7 | - 2 |
| 69 | 38 | - 2 | 6 | 36 | 47 |
| 70 | 24 | - 4 | 21 | 39 | 32 |
| 71 | 41 | - 7 | 30 | 28 | 53 |
| 72 | 2 | -24 | 15 | 4 | 22 |
| 73 | 22 | 1 | 49 | 23 | 28 |
| 74 | 41 | - 0 | 31 | 31 | 49 |
| 75 | -14 | -27 | 3 | 7 | - 5 |
| 76 | 30 | -14 | 32 | 24 | 38 |
| 77 | 6 | 0 | 39 | 14 | 4 |
| 78 | 45 | - 3 | 24 | 29 | 57 |
| 79 | 23 | -14 | 38 | 26 | 33 |
| 80 | 46 | - 6 | 32 | 30 | 54 |
| 81 | 24 | -16 | 23 | 46 | 33 |
| 82 | 53 | 2 | 19 | 51 | 60 |
| 83 | 24 | - 5 | 5 | 34 | 36 |
| 84 | -24 | -26 | 21 | -13 | -16 |
| 85 | 40 | - 5 | 13 | 44 | 47 |
| 86 | 41 | -10 | 11 | 40 | 47 |
| 87 | 53 | - 4 | 13 | 46 | 59 |
| 88 | 1 | -17 | -10 | 16 | 15 |
| 89 | 28 | -17 | 2 | 39 | 37 |

### Table F3 Continued

| | Factor | | | | |
|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 |
| 90 | - 1 | -21 | -21 | 2 | 15 |
| 91 | 9 | - 9 | 39 | 5 | 15 |
| 92 | 40 | -10 | 25 | 44 | 44 |
| 93 | 6 | - 2 | 48 | 17 | 6 |
| 94 | 30 | - 4 | 47 | 22 | 31 |
| 95 | -12 | -12 | 27 | - 1 | - 0 |
| 96 | 10 | -11 | 59 | 17 | 18 |
| 97 | 18 | - 3 | 45 | 20 | 20 |
| 98 | 22 | 5 | 12 | 16 | 18 |
| 99 | -38 | -21 | - 8 | - 8 | -21 |
| 100 | -24 | -26 | -24 | -14 | - 8 |
| 101 | 40 | - 7 | 36 | 28 | 44 |
| 102 | 45 | 7 | 35 | 31 | 48 |
| 103 | 20 | - 2 | 24 | 25 | 26 |
| 104 | 33 | 6 | 32 | 32 | 33 |
| 105 | 32 | -10 | 43 | 25 | 45 |
| 106 | 9 | -11 | 21 | 25 | 12 |
| 107 | 49 | - 7 | 26 | 29 | 54 |
| 103 | -29 | -19 | 22 | - 1 | -20 |
| 109 | - 7 | - 8 | 27 | 9 | - 4 |
| 110 | 28 | - 5 | 31 | 24 | 33 |
| 111 | 8 | -16 | 25 | 1 | 20 |
| 112 | 30 | - 2 | 21 | 36 | 35 |
| 113 | 27 | - 6 | 15 | 37 | 35 |
| 114 | 7 | - 6 | 25 | 38 | 8 |
| 115 | 32 | 1 | 22 | 31 | 39 |
| 116 | 3 | - 3 | 8 | 28 | 9 |
| 117 | 32 | 4 | 17 | 32 | 33 |
| 118 | 36 | - 6 | 10 | 43 | 42 |
| 119 | 36 | 2 | 21 | 39 | 43 |
| 120 | -40 | -28 | 9 | -12 | -20 |
| 121 | 35 | - 3 | 30 | 34 | 40 |
| 122 | 49 | 2 | 29 | 30 | 53 |
| 123 | 48 | 4 | 40 | 35 | 53 |
| 124 | - 1 | - 9 | 7 | 14 | - 2 |
| 125 | 10 | - 7 | 10 | 28 | 19 |
| 126 | 45 | -10 | 22 | 35 | 56 |
| 127 | - 9 | - 7 | 16 | 7 | - 1 |
| 128 | 36 | - 8 | 28 | 38 | 44 |
| 129 | 24 | -14 | 33 | 32 | 36 |
| 130 | 35 | - 9 | 41 | 37 | 41 |
| 131 | 31 | - 6 | 27 | 39 | 40 |
| 132 | 5 | -20 | 6 | 14 | 23 |
| 133 | 40 | 4 | 21 | 43 | 45 |
| 134 | 36 | - 9 | 12 | 40 | 49 |
| 135 | -30 | -17 | 18 | -14 | -17 |

Table F3 Continued

| Item | Factor<br>1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 136 | 41 | 1 | 27 | 42 | 44 |
| 137 | 31 | -11 | 26 | 45 | 40 |
| 138 | 6 | -12 | - 6 | 40 | 17 |
| 139 | 17 | -22 | 4 | 29 | 32 |
| 140 | 43 | - 9 | 21 | 51 | 51 |
| 141 | 37 | 3 | 50 | 25 | 43 |
| 142 | 36 | 0 | 23 | 27 | 42 |
| 143 | 24 | - 5 | 47 | 27 | 31 |
| 144 | 9 | - 9 | 42 | 28 | 13 |
| 145 | 28 | 3 | 35 | 28 | 31 |
| 146 | 2 | - 8 | 41 | 7 | 9 |
| 147 | 33 | - 8 | 47 | 27 | 40 |
| 148 | 46 | 5 | 24 | 30 | 51 |
| 149 | 24 | - 4 | 27 | 13 | 30 |
| 150 | 31 | - 1 | 24 | 33 | 42 |
| 151 | 6 | - 8 | 30 | 6 | 14 |
| 152 | 11 | -11 | 35 | 20 | 18 |
| 153 | 20 | -23 | 42 | 36 | 33 |
| 154 | 33 | -24 | 19 | - 8 | -16 |
| 155 | 30 | - 9 | 34 | 28 | 38 |
| 156 | 26 | -13 | 30 | 23 | 38 |
| 157 | 2 | -14 | 2 | 28 | 15 |
| 158 | -15 | -11 | 23 | 1 | - 3 |
| 159 | - 6 | - 1 | 0 | - 3 | - 5 |
| 160 | 38 | - 2 | 22 | 43 | 44 |
| 161 | 37 | - 1 | 23 | 49 | 38 |
| 162 | 22 | -27 | 1 | 13 | 3 |
| 163 | 9 | - 1 | 43 | 18 | 9 |
| 164 | -13 | -16 | 18 | - 4 | 4 |
| 165 | 38 | 8 | 29 | 43 | 42 |
| 166 | 30 | - 1 | 28 | 48 | 36 |
| 167 | -16 | -24 | 11 | - 2 | 5 |
| 168 | 32 | - 1 | 40 | 46 | 37 |
| 169 | - 7 | - 9 | 25 | 1 | 1 |
| 170 | -27 | -25 | 11 | -12 | - 4 |
| 171 | -26 | -28 | 10 | - 0 | - 7 |
| 172 | -28 | -26 | 5 | - 5 | - 9 |
| 173 | 25 | -19 | 27 | 35 | 36 |
| 174 | 40 | - 0 | 33 | 32 | 50 |
| 175 | 37 | - 8 | 43 | 37 | 46 |
| 176 | 34 | - 8 | 30 | 27 | 45 |
| 177 | 3 | -23 | 31 | 22 | 20 |
| 178 | 43 | - 8 | 27 | 45 | 50 |
| 179 | 9 | -24 | 18 | 26 | 21 |
| 180 | 37 | -13 | 33 | 43 | 45 |
| 181 | 37 | -10 | 28 | 44 | 43 |

Table F3 Continued

| | Factor | | | | |
|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 |
| 182 | 43 | - 6 | 22 | 45 | 50 |
| 183 | 36 | - 9 | 13 | 42 | 46 |
| 184 | 43 | -11 | 20 | 52 | 50 |
| 185 | -18 | -22 | 17 | 2 | - 6 |
| 186 | 24 | -16 | 16 | 27 | 37 |
| 187 | 48 | - 6 | 26 | 50 | 54 |
| 188 | 24 | -17 | 17 | 40 | 36 |
| 189 | 36 | - 9 | 23 | 49 | 44 |
| 190 | 26 | -18 | 29 | 38 | 32 |
| 191 | 10 | -18 | 18 | 30 | 26 |
| 192 | 21 | - 8 | 44 | 18 | 23 |
| 193 | 35 | 1 | 30 | 30 | 42 |
| 194 | - 9 | -11 | 23 | - 3 | 1 |
| 195 | 46 | - 1 | 38 | 41 | 52 |
| 196 | 23 | -10 | 44 | 23 | 29 |
| 197 | - 1 | -16 | 25 | 14 | 5 |
| 198 | 49 | - 2 | 25 | 26 | 43 |
| 199 | 33 | -10 | 44 | 27 | 31 |
| 200 | 16 | - 6 | 22 | 10 | 16 |
| 201 | -19 | -17 | 10 | 5 | -17 |
| 202 | 31 | -18 | 25 | 25 | 29 |
| 203 | - 1 | -25 | 19 | 0 | 8 |
| 204 | -11 | -33 | 9 | -11 | 6 |
| 205 | 46 | - 7 | 16 | 27 | 43 |
| 206 | 49 | - 8 | 22 | 29 | 47 |
| 207 | 7 | -22 | 19 | 17 | 10 |
| 208 | 5 | -30 | 6 | 8 | 14 |
| 209 | 22 | -22 | 18 | 21 | 31 |
| 210 | -18 | -40 | -15 | - 4 | - 1 |
| 211 | 18 | -22 | 8 | 29 | 14 |
| 212 | 35 | -14 | 22 | 36 | 28 |
| 213 | 36 | -10 | 16 | 35 | 33 |
| 214 | 55 | - 9 | 21 | 44 | 48 |
| 215 | -24 | -36 | 4 | -13 | -14 |
| 216 | 29 | -20 | 0 | 30 | 18 |
| 217 | 26 | -28 | 11 | 35 | 23 |
| 218 | 9 | -23 | 14 | 24 | 7 |
| 219 | -23 | -38 | 10 | - 7 | -10 |
| 220 | 30 | -17 | 6 | 37 | 22 |
| 221 | 41 | -25 | 7 | 29 | 36 |
| 222 | 6 | -37 | - 9 | 3 | 20 |
| 223 | 54 | -12 | 23 | 33 | 43 |
| 224 | 51 | -20 | 32 | 32 | 39 |
| 225 | 59 | -17 | 26 | 38 | 48 |
| 226 | 40 | -24 | 8 | 23 | 40 |
| 227 | 13 | -31 | 8 | 13 | 13 |
| 228 | 26 | -31 | 13 | 18 | 17 |

**Table F3 Continued**

| | Factor | | | | |
|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 |
| 229 | 29 | -26 | 24 | 24 | 19 |
| 230 | 34 | -32 | 8 | 19 | 34 |
| 231 | 36 | -31 | - 0 | 30 | 26 |
| 232 | 47 | -28 | 11 | 45 | 34 |
| 233 | 49 | -22 | 3 | 43 | 37 |
| 234 | 45 | -26 | 3 | 44 | 32 |
| 235 | 54 | -24 | 17 | 44 | 37 |
| 236 | 44 | -24 | 2 | 37 | 29 |
| 237 | 38 | -33 | - 4 | 38 | 22 |
| 238 | 55 | -24 | 15 | 44 | 37 |
| 239 | 51 | -20 | 7 | 40 | 32 |
| 240 | 55 | -21 | 12 | 35 | 35 |
| 241 | - 6 | -47 | -14 | 3 | - 1 |
| 242 | 8 | -40 | - 5 | 3 | 8 |
| 243 | 44 | -13 | 19 | 24 | 20 |
| 244 | 20 | -26 | 21 | 6 | 6 |
| 245 | 22 | -42 | 14 | 18 | 16 |
| 246 | 61 | -18 | 17 | 33 | 39 |
| 247 | 45 | -29 | 8 | 19 | 38 |
| 248 | - 1 | -49 | - 9 | - 1 | 2 |
| 249 | - 6 | - 1 | 0 | - 3 | - 5 |
| 250 | 5 | -46 | - 2 | 3 | - 2 |
| 251 | 4 | -47 | 9 | 6 | - 0 |
| 252 | 34 | -41 | 6 | 7 | 33 |
| 253 | 21 | -49 | 4 | 9 | 19 |
| 254 | 26 | -41 | 21 | 22 | 17 |
| 255 | 47 | -40 | 20 | 26 | 33 |
| 256 | 38 | -32 | 18 | 18 | 32 |
| 257 | 49 | -21 | 29 | 24 | 34 |
| 258 | 50 | -40 | 14 | 28 | 34 |
| 259 | - 2 | -56 | 8 | 3 | - 7 |
| 260 | 15 | -39 | 17 | 6 | 8 |
| 261 | 58 | -26 | 16 | 41 | 35 |
| 262 | 51 | -32 | 18 | 41 | 30 |
| 263 | 38 | -34 | 9 | 33 | 22 |
| 264 | 22 | -40 | 8 | 28 | 4 |
| 265 | - 7 | -58 | 1 | - 2 | -11 |
| 266 | - 5 | -52 | - 2 | - 8 | - 7 |
| 267 | 46 | -38 | 11 | 36 | 22 |
| 268 | 30 | -39 | 5 | 30 | 12 |
| 269 | 12 | -46 | 7 | 6 | 0 |
| 270 | 55 | -28 | 16 | 38 | 30 |
| 271 | 45 | -42 | 9 | 22 | 35 |
| 272 | 48 | -36 | 12 | 32 | 34 |
| 273 | 57 | -36 | 21 | 37 | 35 |
| 274 | 52 | -33 | 25 | 27 | 39 |
| 275 | 45 | -40 | 3 | 24 | 37 |

### Table F3 Continued

| | Factor | | | | |
|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 |
| 276 | 52 | -20 | 9 | 15 | 30 |
| 277 | 39 | -36 | 13 | 21 | 27 |
| 278 | 29 | -51 | 7 | 29 | 18 |
| 279 | 2 | -58 | 10 | 1 | - 3 |
| 280 | 43 | -28 | 8 | 22 | 27 |
| 281 | 44 | -40 | 7 | 38 | 32 |
| 282 | 31 | -55 | 4 | 35 | 14 |
| 283 | 49 | -35 | 13 | 34 | 31 |
| 284 | - 1 | -51 | 4 | - 6 | - 8 |
| 285 | 54 | -34 | 14 | 35 | 33 |
| 286 | 44 | -41 | 6 | 33 | 24 |
| 287 | 41 | -34 | 8 | 30 | 24 |
| 288 | 9 | -61 | 11 | 3 | 1 |
| 289 | - 7 | -52 | 0 | - 7 | -10 |
| 290 | - 1 | -51 | 10 | - 3 | - 7 |
| 291 | 17 | -54 | -13 | 10 | 13 |
| 292 | - 5 | -49 | - 4 | - 2 | -10 |
| 293 | -10 | -59 | - 8 | - 4 | -13 |
| 294 | 15 | -61 | - 3 | 8 | 8 |
| 295 | 45 | -28 | 27 | 23 | 29 |
| 296 | 13 | -46 | 8 | 15 | - 4 |
| 297 | - 7 | -62 | - 9 | 3 | - 6 |
| 298 | -10 | -59 | - 3 | - 2 | -11 |
| 299 | 17 | -32 | 18 | 17 | 1 |
| 300 | 13 | -51 | -14 | 7 | 9 |

## Table F4

Correlation Matrix by Rows Below
Diagonal for SPS Item Scores
1, 4, 7, ---, 298

Factor

| Row | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | - 5 | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 20 | - 8 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 35 | - 5 | | | | | | | | | | | | | | | | | | | | | |
| 5 | 5 | 19 | 2 | 24 | | | | | | | | | | | | | | | | | | | | |
| 6 | 18 | - 5 | 27 | 2 | 10 | | | | | | | | | | | | | | | | | | | |
| 7 | 14 | 10 | 7 | 21 | 20 | 12 | | | | | | | | | | | | | | | | | | |
| 8 | 0 | 28 | - 2 | 30 | 28 | 4 | 15 | | | | | | | | | | | | | | | | | |
| 9 | 21 | - 9 | 23 | 3 | - 3 | 27 | 8 | 8 | | | | | | | | | | | | | | | | |
| 10 | 19 | - 2 | 18 | 0 | -10 | -83 | -94 | -12 | 36 | | | | | | | | | | | | | | | |
| 11 | 16 | -11 | 16 | - 2 | 3 | 22 | 13 | - 7 | 35 | 29 | | | | | | | | | | | | | | |
| 12 | 18 | - 5 | 20 | 2 | 2 | 27 | 17 | - 5 | 33 | 25 | 36 | | | | | | | | | | | | | |
| 13 | 14 | - 2 | 8 | - 0 | - 2 | 12 | 13 | - 4 | 17 | 21 | 20 | 15 | | | | | | | | | | | | |
| 14 | 1 | 7 | 6 | 16 | - 2 | 7 | 10 | 3 | 12 | 18 | 15 | 13 | 11 | | | | | | | | | | | |
| 15 | - 3 | 27 | 1 | 23 | 13 | 5 | 8 | 22 | 1 | 1 | 5 | 3 | - 1 | 13 | | | | | | | | | | |
| 16 | 15 | 1 | 12 | 11 | 14 | 9 | 12 | 8 | 13 | 9 | 12 | 13 | 14 | - 4 | - 5 | | | | | | | | | |
| 17 | - 1 | 24 | 3 | 18 | 1 | 2 | 2 | 9 | 6 | 6 | 1 | 2 | 1 | 17 | 19 | -12 | | | | | | | | |
| 18 | 6 | 21 | 6 | 21 | 23 | 10 | 13 | 24 | 2 | 3 | 2 | 4 | 2 | 5 | 16 | 21 | 1 | | | | | | | |
| 19 | 14 | 7 | 16 | 2 | 8 | 13 | 14 | - 3 | 24 | 18 | 21 | 23 | 3 | 5 | 8 | 12 | 3 | 7 | | | | | | |
| 20 | 4 | 21 | 6 | 17 | 18 | 6 | 12 | 18 | 11 | 3 | 7 | 7 | 2 | 5 | 15 | 21 | 10 | 23 | 11 | | | | | |
| 21 | 12 | 4 | 7 | 9 | 15 | 25 | 23 | 2 | 18 | 15 | 25 | 21 | 9 | 13 | 17 | 11 | - 1 | 15 | 12 | 15 | | | | |
| 22 | 9 | 1 | 9 | 5 | 2 | 18 | 14 | - 9 | 26 | 26 | 20 | 23 | 13 | 12 | 9 | 9 | 6 | 5 | 13 | 5 | 14 | | | |
| 23 | 13 | -16 | 21 | - 9 | - 3 | 21 | 8 | -19 | 28 | 18 | 27 | 22 | 11 | 6 | - 7 | 11 | - 1 | - 0 | 15 | 1 | 21 | 14 | | |
| 24 | 11 | - 3 | 3 | 2 | 11 | 22 | 16 | - 3 | 15 | 14 | 22 | 22 | 7 | 11 | 6 | 6 | - 3 | 6 | 11 | 5 | 37 | 14 | 20 | |
| 25 | 20 | - 1 | 8 | 2 | 9 | 15 | 13 | 0 | 12 | 5 | 10 | 15 | 6 | - 5 | - 2 | 17 | - 9 | 17 | 15 | 15 | 11 | 8 | 14 | 16 |

**Table F4 Continued**

**Factor**

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 15 | - 1 | 13 | - 7 | 2 | 15 | 3 | - 7 | 20 | 18 |
| | 11 | 12 | 8 | 1 | 1 | 4 | - 1 | 8 | 16 | 4 |
| | 6 | 16 | 15 | 5 | 22 | | | | | |
| 27 | 15 | 5 | 9 | - 1 | 3 | 14 | 10 | 2 | 18 | 13 |
| | 11 | 14 | 7 | 3 | 2 | 9 | 1 | 9 | 20 | 11 |
| | 12 | 12 | 13 | 17 | 21 | 20 | | | | |
| 28 | 18 | -18 | 19 | - 9 | - 8 | 24 | 12 | -21 | 35 | 30 |
| | 34 | 40 | 22 | 13 | - 4 | 8 | - 3 | - 8 | 22 | 2 |
| | 25 | 25 | 33 | 21 | 15 | 18 | 17 | | | |
| 29 | 3 | -10 | 16 | - 1 | - 5 | 18 | 8 | -14 | 22 | 23 |
| | 31 | 33 | 17 | 12 | - 3 | 5 | 2 | - 2 | 22 | 1 |
| | 20 | 22 | 26 | 21 | 8 | 17 | 15 | 38 | | |
| 30 | - 2 | 7 | - 4 | 6 | - 5 | - 0 | 6 | - 1 | 10 | 13 |
| | 12 | 16 | 2 | 10 | 10 | -17 | 17 | 0 | 2 | 1 |
| | 9 | 8 | 4 | 9 | - 2 | - 7 | 4 | 9 | 23 | |
| 31 | 12 | 4 | 8 | - 0 | 3 | 9 | 9 | 5 | 8 | 2 |
| | 2 | 4 | - 2 | - 9 | 0 | 11 | - 4 | 5 | 13 | 5 |
| | 1 | 4 | 11 | 10 | 26 | 17 | 18 | - 1 | 0 | - 4 |
| 32 | 29 | - 8 | 15 | - 2 | 1 | 17 | 6 | - 2 | 15 | 9 |
| | 12 | 13 | 5 | - 3 | - 8 | 20 | - 9 | 11 | 18 | 11 |
| | 14 | 8 | 22 | 13 | 30 | 27 | 26 | 20 | 8 | - 7 |
| | 27 | | | | | | | | | |
| 33 | 20 | 5 | 11 | 3 | 11 | 13 | 12 | 3 | 7 | 2 |
| | 6 | 11 | 9 | - 7 | - 2 | 22 | - 8 | 17 | 12 | 18 |
| | 10 | 10 | 8 | 10 | 26 | 19 | 21 | 10 | 13 | - 0 |
| | 20 | 30 | | | | | | | | |
| 34 | -15 | 16 | - 7 | 12 | - 4 | -10 | - 3 | 8 | - 2 | 1 |
| | - 7 | - 7 | - 9 | 18 | 22 | -30 | 23 | - 8 | - 6 | - 5 |
| | - 4 | 2 | -12 | - 6 | -14 | - 7 | - 3 | -15 | - 3 | 23 |
| | 2 | -18 | -17 | | | | | | | |
| 35 | 15 | 1 | 7 | 2 | 10 | 13 | 13 | - 0 | 12 | 14 |
| | 14 | 14 | 4 | 8 | 5 | 9 | - 7 | 9 | 9 | 12 |
| | 15 | 12 | 14 | 16 | 10 | 8 | 10 | 18 | 13 | 4 |
| | 6 | 16 | 12 | - 2 | | | | | | |
| 36 | 3 | 6 | 2 | 9 | 9 | 4 | 4 | 5 | 3 | 5 |
| | 7 | 8 | 1 | 4 | 16 | 7 | - 2 | 17 | 11 | 16 |
| | 14 | 9 | 1 | 15 | 14 | 9 | 9 | 5 | 6 | 3 |
| | 7 | 11 | 10 | - 1 | 12 | | | | | |
| 37 | 4 | 11 | 3 | 15 | 14 | 0 | 6 | 17 | - 8 | - 6 |
| | - 5 | - 0 | - 3 | - 1 | 10 | 12 | - 3 | 26 | 8 | 15 |
| | 2 | - 3 | - 5 | 8 | 9 | 6 | 11 | -11 | 1 | - 4 |
| | 6 | 15 | 17 | - 7 | 1 | 18 | | | | |
| 38 | 13 | - 5 | 10 | - 4 | 5 | 13 | 9 | - 6 | 20 | 17 |
| | 26 | 23 | 14 | 6 | 6 | 5 | - 1 | 5 | 13 | 10 |
| | 18 | 15 | 23 | 17 | 9 | 10 | 13 | 26 | 17 | 5 |
| | 9 | 11 | 5 | - 4 | 17 | 9 | 1 | | | |

## Table F4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 22 | -12 | 10 | -10 | 1 | 14 | 6 | - 8 | 21 | 15 |
| | 21 | 19 | 10 | - 3 | - 1 | 7 | - 5 | - 3 | 11 | 3 |
| | 13 | 14 | 15 | 17 | 15 | 20 | 11 | 22 | 16 | - 2 |
| | 9 | 14 | 8 | - 4 | 16 | 12 | 2 | 23 | | |
| 40 | 15 | -11 | 6 | - 7 | - 2 | 15 | 12 | -11 | 22 | 20 |
| | 27 | 23 | 12 | 15 | 9 | 6 | 1 | - 7 | 13 | 7 |
| | 18 | 17 | 17 | 16 | 10 | 12 | 7 | 32 | 21 | 8 |
| | - 4 | 5 | - 3 | - 4 | 15 | 17 | -10 | 21 | 31 | |
| 41 | 18 | - 5 | 14 | - 7 | - 4 | 17 | 4 | -13 | 20 | 18 |
| | 16 | 19 | 14 | 6 | - 4 | 14 | - 2 | 4 | 12 | 11 |
| | 14 | 14 | 19 | 14 | 15 | 15 | 16 | 22 | 16 | 3 |
| | 8 | 16 | 13 | -17 | 14 | 12 | 4 | 20 | 18 | 22 |
| 42 | - 2 | 5 | - 1 | 3 | 14 | - 0 | 4 | 10 | 0 | - 4 |
| | 0 | 0 | 0 | 2 | 8 | 8 | - 6 | 16 | - 5 | 7 |
| | 9 | - 0 | - 1 | 3 | 2 | - 0 | 1 | - 4 | 2 | 5 |
| | 3 | 3 | 6 | 2 | 8 | 13 | 13 | 4 | 1 | 5 |
| | 12 | | | | | | | | | |
| 43 | 2 | 10 | - 3 | 8 | 15 | 2 | 10 | 15 | - 2 | - 2 |
| | 3 | - 2 | - 4 | - 2 | 6 | 4 | 2 | 6 | 3 | 6 |
| | 7 | - 1 | - 3 | 4 | 6 | 4 | 4 | - 5 | - 4 | 2 |
| | 7 | 8 | 8 | 8 | 1 | 11 | 12 | 4 | 0 | 3 |
| | 6 | 17 | | | | | | | | |
| 44 | 20 | - 2 | 18 | 2 | - 2 | 22 | 12 | - 5 | 14 | 16 |
| | 16 | 18 | 12 | 6 | - 1 | 15 | 0 | 7 | 17 | 14 |
| | 16 | 15 | 27 | 19 | 24 | 21 | 18 | 22 | 19 | 1 |
| | 14 | 19 | 22 | -16 | 13 | 9 | 5 | 24 | 20 | 17 |
| | 28 | 5 | 2 | | | | | | | |
| 45 | 16 | -10 | 14 | - 2 | 0 | 14 | 9 | -12 | 22 | 17 |
| | 28 | 24 | 17 | 6 | - 4 | 4 | - 5 | - 0 | 19 | - 0 |
| | 19 | 15 | 28 | 18 | 11 | 10 | 11 | 37 | 25 | 11 |
| | 2 | 11 | 8 | -11 | 16 | 10 | 1 | 24 | 22 | 29 |
| | 22 | 8 | 3 | 24 | | | | | | |
| 46 | 11 | -11 | 8 | - 6 | 4 | 15 | 8 | - 6 | 19 | 16 |
| | 27 | 21 | 13 | - 1 | - 2 | 8 | - 5 | 1 | 12 | 4 |
| | 30 | 14 | 23 | 18 | 20 | 12 | 12 | 35 | 21 | 5 |
| | 4 | 16 | 8 | - 8 | 14 | 3 | - 7 | 33 | 28 | 28 |
| | 22 | 3 | 2 | 26 | 33 | | | | | |
| 47 | 5 | 4 | 3 | 8 | - 4 | 6 | 0 | - 0 | 16 | 21 |
| | 15 | 15 | 6 | 20 | 17 | - 4 | 16 | - 1 | 13 | 5 |
| | 11 | 16 | 8 | 10 | 3 | 15 | 6 | 21 | 15 | 16 |
| | - 3 | 2 | - 6 | 19 | 8 | 5 | - 1 | 12 | 14 | 19 |
| | 14 | 2 | - 3 | 15 | 22 | 18 | | | | |
| 48 | 15 | -11 | 15 | - 7 | - 0 | 17 | 9 | - 9 | 22 | 18 |
| | 16 | 14 | 9 | 3 | - 6 | 9 | 3 | - 1 | 9 | 1 |
| | 10 | 19 | 26 | 14 | 14 | 17 | 13 | 21 | 20 | - 3 |
| | 10 | 16 | 9 | - 2 | 19 | 1 | - 8 | 15 | 20 | 21 |
| | 13 | - 1 | - 7 | 16 | 22 | 22 | 16 | | | |

Table F4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 49 | 25 | - 7 | 10 | - 2 | 3 | 13 | 10 | 0 | 11 | 12 |
| | 17 | 14 | 7 | - 1 | - 7 | 13 | - 7 | 3 | 18 | 2 |
| | 19 | 3 | 13 | 14 | 23 | 7 | 17 | 18 | 13 | 0 |
| | 12 | 27 | 18 | -10 | 13 | 6 | 4 | 17 | 17 | 10 |
| | 10 | 3 | 6 | 13 | 23 | 26 | 8 | 24 | | |
| 50 | 26 | -20 | 18 | -11 | - 3 | 21 | 2 | -13 | 27 | 30 |
| | 26 | 23 | 17 | 3 | -11 | 7 | - 4 | - 7 | 14 | - 8 |
| | 13 | 16 | 28 | 13 | 20 | 19 | 16 | 33 | 23 | 4 |
| | 7 | 22 | 9 | -11 | 13 | 2 | - 9 | 17 | 32 | 28 |
| | 16 | - 3 | - 8 | 21 | 30 | 30 | 13 | 36 | 31 | |
| 51 | 16 | 3 | 6 | 3 | 6 | 6 | 3 | 3 | 3 | 4 |
| | - 2 | 0 | - 2 | - 3 | - 0 | 8 | - 1 | 9 | 1 | 3 |
| | 3 | 7 | 4 | 3 | 14 | 12 | 9 | - 1 | 1 | - 1 |
| | 14 | 16 | 22 | 1 | 6 | 7 | 11 | - 2 | 6 | - 1 |
| | 7 | 7 | 6 | 13 | 2 | 4 | 1 | 7 | 10 | 12 |
| 52 | -10 | 26 | - 7 | 18 | 13 | - 7 | 7 | 32 | -13 | - 6 |
| | -16 | -11 | - 3 | - 4 | 11 | 0 | 6 | 14 | 2 | 10 |
| | - 4 | 1 | -13 | 0 | 3 | - 0 | 6 | -22 | -13 | 1 |
| | 14 | - 2 | 9 | 14 | 2 | 7 | 16 | - 7 | - 7 | -16 |
| | - 8 | 13 | 20 | - 0 | -11 | -10 | 4 | -14 | - 4 | -24 |
| | 16 | | | | | | | | | |
| 53 | - 3 | 10 | - 4 | 8 | 3 | 1 | 11 | 4 | 7 | 8 |
| | 3 | 7 | 7 | 11 | 13 | 2 | 1 | 3 | 7 | 10 |
| | 12 | 10 | 2 | 11 | - 1 | - 2 | 6 | 6 | 11 | 11 |
| | - 9 | - 9 | - 7 | 9 | 8 | 12 | 3 | 11 | 6 | 13 |
| | 4 | 12 | 9 | 6 | 13 | 12 | 16 | 6 | 4 | 0 |
| | -11 | 17 | | | | | | | | |
| 54 | 10 | -13 | 9 | - 7 | 3 | 17 | 11 | - 8 | 23 | 16 |
| | 27 | 26 | 10 | 7 | - 3 | 11 | - 7 | - 2 | 20 | 3 |
| | 19 | 14 | 19 | 16 | 13 | 13 | 9 | 34 | 23 | 4 |
| | - 1 | 15 | 4 | - 9 | 14 | 10 | - 6 | 20 | 27 | 34 |
| | 19 | 6 | 7 | 22 | 31 | 33 | 22 | 23 | 22 | 37 |
| | 3 | -10 | 16 | | | | | | | |
| 55 | 11 | - 1 | 6 | 3 | 14 | 7 | 7 | 8 | - 0 | - 3 |
| | 2 | 9 | - 1 | - 8 | - 2 | 23 | -14 | 23 | 7 | 16 |
| | 7 | - 3 | 9 | 6 | 24 | 14 | 13 | 0 | 2 | - 9 |
| | 19 | 26 | 23 | -20 | 12 | 12 | 25 | 7 | 7 | 1 |
| | 14 | 13 | 8 | 18 | 10 | 6 | 2 | 2 | 13 | 3 |
| | 13 | 17 | 1 | 6 | | | | | | |
| 56 | 13 | - 9 | 11 | - 2 | 11 | 14 | 11 | - 3 | 16 | 15 |
| | 22 | 20 | 6 | 6 | 3 | 12 | - 3 | 3 | 17 | 11 |
| | 19 | 15 | 21 | 21 | 12 | 6 | 18 | 22 | 20 | 3 |
| | 4 | 11 | 7 | - [illegible] | 13 | 14 | 3 | 27 | 23 | 24 |
| | 20 | 9 | 8 | 29 | 34 | 31 | 16 | 20 | 21 | 20 |
| | 3 | 4 | 19 | 32 | 17 | | | | | |

Table F4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57 | 7 | 5 | - 1 | 6 | 7 | 1 | 4 | 6 | 1 | 3 |
| | - 6 | - 6 | - 5 | - 1 | 1 | 6 | - 0 | 10 | 6 | 3 |
| | - 0 | - 1 | - 2 | 5 | 9 | 13 | 12 | - 9 | - 6 | - 4 |
| | 13 | 12 | 16 | - 1 | 2 | 1 | 14 | 1 | 2 | - 4 |
| | 3 | 8 | 12 | 6 | - 2 | 1 | 3 | 5 | 11 | - 2 |
| | 12 | 26 | 6 | - 2 | 17 | 3 | | | | |
| 58 | - 9 | 22 | - 8 | 13 | 4 | - 8 | 1 | 14 | - 5 | - 2 |
| | - 8 | - 4 | - 7 | 2 | 15 | - 3 | 13 | 7 | - 2 | 8 |
| | - 3 | - 6 | -15 | - 6 | 0 | - 1 | - 2 | -19 | - 6 | 10 |
| | 4 | - 5 | 2 | 20 | - 7 | 7 | 11 | - 4 | - 7 | -12 |
| | -10 | 2 | 9 | - 3 | - 8 | -13 | 6 | - 8 | - 2 | -15 |
| | 5 | 31 | 16 | - 4 | 6 | - 1 | 19 | | | |
| 59 | 19 | - 5 | 17 | - 3 | 6 | 20 | 7 | - 4 | 20 | 21 |
| | 17 | 18 | 12 | 0 | - 6 | 14 | - 6 | 2 | 17 | 6 |
| | 18 | 15 | 22 | 16 | 22 | 26 | 22 | 25 | 19 | - 4 |
| | 18 | 26 | 15 | -14 | 15 | 11 | 5 | 21 | 20 | 13 |
| | 26 | 1 | 4 | 31 | 21 | 26 | 7 | 24 | 21 | 23 |
| | 11 | - 1 | 6 | 23 | 14 | 23 | 11 | 1 | | |
| 60 | 11 | -14 | 15 | - 7 | - 3 | 17 | 6 | - 9 | 21 | 18 |
| | 23 | 24 | 17 | 1 | - 6 | 10 | - 2 | 3 | 16 | 4 |
| | 10 | 15 | 24 | 12 | 13 | 19 | 16 | 34 | 33 | 4 |
| | 1 | 12 | 8 | -14 | 7 | 4 | 0 | 25 | 17 | 20 |
| | 22 | 2 | - 4 | 24 | 33 | 28 | 19 | 22 | 15 | 25 |
| | 6 | - 2 | 16 | 30 | 9 | 28 | 7 | - 2 | 30 | |
| 61 | 10 | - 5 | 13 | - 2 | 7 | 18 | 8 | - 5 | 21 | 20 |
| | 25 | 22 | 12 | 7 | 1 | 8 | - 4 | 10 | 14 | 8 |
| | 21 | 15 | 23 | 14 | 16 | 16 | 21 | 24 | 20 | 12 |
| | 12 | 17 | 13 | - 1 | 16 | 12 | 0 | 29 | 23 | 21 |
| | 19 | 7 | 3 | 26 | 32 | 32 | 18 | 15 | 20 | 24 |
| | 10 | 0 | 13 | 24 | 12 | 33 | 8 | - 3 | 32 | 36 |
| 62 | 11 | - 9 | 12 | - 3 | 1 | 12 | 12 | -10 | 25 | 18 |
| | 24 | 30 | 9 | 10 | 1 | 2 | - 2 | 0 | 17 | 5 |
| | 15 | 16 | 22 | 18 | 6 | 14 | 12 | 34 | 30 | 14 |
| | 1 | 10 | 9 | - 5 | 12 | 8 | 3 | 21 | 23 | 24 |
| | 20 | 5 | 5 | 22 | 34 | 26 | 22 | 20 | 15 | 26 |
| | 4 | - 8 | 20 | 34 | 10 | 35 | 0 | - 2 | 28 | 37 |
| | 32 | | | | | | | | | |
| 63 | 18 | -11 | 14 | - 4 | 3 | 23 | 13 | -12 | 26 | 24 |
| | 27 | 26 | 18 | 9 | - 0 | 8 | - 6 | - 1 | 23 | 3 |
| | 22 | 17 | 27 | 22 | 14 | 17 | 19 | 34 | 29 | 6 |
| | 5 | 13 | 10 | -11 | 16 | 7 | - 2 | 24 | 26 | 28 |
| | 25 | 1 | 1 | 23 | 37 | 34 | 12 | 26 | 19 | 33 |
| | 9 | -11 | 11 | 30 | 9 | 30 | - 0 | - 8 | 29 | 34 |
| | 35 | 40 | | | | | | | | |

### Table F4 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 64 | 7 | 3 | 3 | 3 | 6 | 14 | 7 | - 2 | 13 | 10 |
| | 14 | 18 | 7 | 4 | 7 | 9 | - 0 | 8 | 10 | 13 |
| | 15 | 9 | 9 | 10 | 16 | 20 | 18 | 15 | 18 | 1 |
| | 7 | 13 | 13 | - 7 | 7 | 16 | 11 | 13 | 15 | 15 |
| | 20 | 7 | 6 | 22 | 20 | 22 | 17 | 8 | 16 | 14 |
| | 9 | 6 | 17 | 21 | 18 | 27 | 2 | 7 | 27 | 23 |
| | 28 | 28 | 27 | | | | | | | |
| 65 | 19 | -10 | 24 | - 8 | 0 | 20 | 5 | - 9 | 17 | 21 |
| | 24 | 24 | 10 | 5 | - 6 | 11 | - 4 | 1 | 17 | 4 |
| | 8 | 11 | 21 | 10 | 10 | 15 | 12 | 27 | 20 | 3 |
| | 1 | 13 | 12 | - 6 | 17 | 7 | 1 | 16 | 21 | 18 |
| | 18 | - 1 | - 0 | 22 | 25 | 28 | 15 | 23 | 19 | 33 |
| | 15 | -10 | 7 | 26 | 15 | 21 | 10 | - 6 | 21 | 28 |
| | 24 | 24 | 35 | 16 | | | | | | |
| 66 | 13 | 2 | 9 | 0 | - 0 | 7 | 8 | - 1 | 8 | 5 |
| | 2 | 6 | 7 | - 2 | - 4 | 17 | - 7 | 5 | 8 | 12 |
| | 5 | 9 | 10 | 6 | 20 | 21 | 19 | 8 | 4 | -10 |
| | 23 | 19 | 19 | -14 | 11 | 13 | 7 | 17 | 12 | 7 |
| | 20 | 3 | 7 | 31 | 12 | 21 | 3 | 10 | 14 | 14 |
| | 15 | 11 | 5 | 11 | 26 | 18 | 14 | 5 | 25 | 19 |
| | 25 | 13 | 20 | 24 | 20 | | | | | |
| 67 | 21 | - 8 | 17 | - 2 | 9 | 19 | 5 | 1 | 11 | 2 |
| | 12 | 15 | 4 | - 6 | - 1 | 17 | - 6 | 12 | 19 | 10 |
| | 17 | 10 | 13 | 18 | 26 | 17 | 16 | 14 | 8 | - 4 |
| | 23 | 26 | 23 | - 8 | 17 | 10 | 8 | 15 | 13 | 10 |
| | 16 | 2 | 1 | 26 | 13 | 18 | 3 | 15 | 18 | 15 |
| | 14 | 1 | - 5 | 13 | 18 | 13 | 11 | - 0 | 26 | 17 |
| | 20 | 13 | 22 | 13 | 22 | 23 | | | | |
| 68 | 15 | - 2 | 9 | - 0 | - 3 | 11 | 10 | - 2 | 10 | 10 |
| | 12 | 13 | 2 | 1 | 0 | 7 | - 4 | 8 | 12 | 7 |
| | 17 | 15 | 10 | 17 | 14 | 17 | 12 | 12 | 14 | 0 |
| | 15 | 13 | 15 | - 7 | 12 | 7 | 8 | 15 | 8 | 12 |
| | 10 | 3 | - 2 | 21 | 14 | 13 | 8 | 9 | 10 | 7 |
| | 4 | - 3 | 0 | 12 | 9 | 16 | 1 | - 1 | 18 | 25 |
| | 21 | 18 | 20 | 16 | 13 | 18 | 28 | | | |
| 69 | 15 | -16 | 13 | -11 | - 6 | 16 | 1 | -10 | 27 | 24 |
| | 21 | 20 | 6 | 5 | - 7 | 5 | - 4 | - 3 | 17 | - 3 |
| | 9 | 20 | 21 | 10 | 12 | 21 | 12 | 23 | 24 | 6 |
| | 8 | 16 | 5 | - 9 | 8 | 5 | - 3 | 11 | 17 | 22 |
| | 9 | 0 | - 5 | 16 | 16 | 17 | 8 | 16 | 15 | 27 |
| | 5 | -19 | - 6 | 19 | 2 | 10 | - 0 | -10 | 16 | 21 |
| | 19 | 22 | 26 | 8 | 21 | 9 | 20 | 29 | | |

## Table F4 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 | 1 | 10 | 1 | 6 | -4 | 5 | 2 | -1 | 8 | 8 |
| | 2 | 6 | -0 | 12 | 8 | -5 | 13 | 1 | 2 | 8 |
| | 8 | 5 | 1 | -1 | 3 | 8 | 1 | 1 | 6 | 9 |
| | 5 | 1 | 1 | 13 | 1 | 5 | 1 | 5 | 4 | 10 |
| | 1 | -1 | 1 | 10 | -2 | 5 | 11 | -1 | 8 | 4 |
| | 0 | 5 | 2 | 3 | 6 | 1 | 1 | 15 | 2 | 1 |
| | 9 | 6 | 6 | 12 | 8 | 7 | 10 | 19 | 12 | |
| 71 | 2 | 5 | 2 | 1 | -3 | 9 | 4 | -3 | 4 | 8 |
| | 8 | 6 | 0 | 8 | 9 | 2 | 2 | 3 | 9 | 8 |
| | 20 | 6 | 0 | 17 | -2 | 3 | 5 | 8 | 8 | -1 |
| | 5 | 5 | 7 | 0 | 7 | 9 | 4 | 9 | 8 | 8 |
| | 8 | 5 | 0 | 3 | 3 | 10 | 6 | -1 | 1 | -5 |
| | 4 | 0 | 13 | 8 | 5 | 12 | -0 | 4 | 7 | 9 |
| | 9 | 9 | 13 | 9 | -1 | 7 | 9 | 10 | 7 | 8 |
| 72 | 18 | -12 | 11 | -9 | -1 | 16 | 4 | -15 | 23 | 24 |
| | 24 | 25 | 10 | 3 | -4 | 9 | -4 | 4 | 16 | 2 |
| | 18 | 20 | 20 | 15 | 15 | 19 | 11 | 32 | 22 | 2 |
| | -0 | 19 | 14 | -14 | 16 | 8 | -0 | 19 | 25 | 27 |
| | 21 | 3 | -6 | 20 | 20 | 24 | 16 | 18 | 17 | 28 |
| | -2 | -27 | 1 | 26 | 4 | 19 | -8 | -20 | 24 | 26 |
| | 26 | 27 | 29 | 20 | 21 | 12 | 26 | 26 | 35 | 5 |
| | 17 | | | | | | | | | |
| 73 | 3 | -1 | 8 | 7 | 2 | 9 | 6 | -1 | 7 | 8 |
| | 14 | 13 | 3 | 8 | 2 | 0 | 4 | 3 | 6 | 7 |
| | 15 | 10 | 6 | 13 | 5 | 4 | 9 | 19 | 17 | 6 |
| | -5 | 4 | 4 | 1 | 11 | 5 | 2 | 15 | 3 | 9 |
| | 10 | 5 | 7 | 15 | 13 | 15 | 15 | 6 | 4 | 5 |
| | 1 | -2 | 1 | 16 | 4 | 20 | -4 | -3 | 6 | 18 |
| | 19 | 19 | 17 | 16 | 10 | 5 | 18 | 21 | 14 | 18 |
| | 25 | 17 | | | | | | | | |
| 74 | 3 | -8 | 5 | -4 | 3 | 10 | 5 | -7 | 12 | 5 |
| | 21 | 15 | 3 | 4 | 8 | 3 | -5 | 2 | 9 | 6 |
| | 19 | 9 | 13 | 15 | 1 | 4 | 4 | 19 | 19 | 2 |
| | -3 | 6 | 3 | -4 | 11 | 5 | 5 | 17 | 11 | 20 |
| | 6 | 2 | 4 | 6 | 14 | 16 | 9 | 9 | 6 | 8 |
| | -13 | -13 | 16 | 21 | 4 | 22 | -10 | -5 | 11 | 22 |
| | 16 | 22 | 18 | 16 | 9 | -0 | 16 | 14 | 13 | 12 |
| | 20 | 26 | 25 | | | | | | | |
| 75 | 18 | -11 | 18 | -5 | -2 | 18 | 4 | -12 | 19 | 16 |
| | 19 | 16 | 7 | -4 | -10 | 9 | 4 | 1 | 17 | 2 |
| | 6 | 13 | 17 | 8 | 10 | 19 | 13 | 23 | 15 | -1 |
| | 2 | 18 | 11 | -12 | 17 | 5 | 1 | 11 | 18 | 18 |
| | 18 | -7 | -4 | 19 | 19 | 20 | 10 | 13 | 14 | 25 |
| | 2 | -27 | -11 | 18 | 4 | 10 | -8 | -20 | 19 | 20 |
| | 18 | 20 | 25 | 14 | 27 | 14 | 28 | 27 | 36 | 5 |
| | 9 | 40 | 22 | 19 | | | | | | |

### Table F4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 76 | 12 | -6 | 7 | 1 | -1 | 10 | 4 | -10 | 25 | 21 |
| | 17 | 19 | 7 | 9 | -1 | -2 | 11 | -4 | 11 | 3 |
| | 7 | 16 | 11 | 7 | 6 | 17 | 8 | 22 | 10 | 7 |
| | -1 | 14 | 3 | 3 | 12 | 1 | -5 | 11 | 12 | 20 |
| | 16 | -3 | -7 | 16 | 14 | 12 | 13 | 15 | 6 | 19 |
| | 3 | -19 | -2 | 15 | -9 | 4 | -8 | -12 | 12 | 16 |
| | 19 | 12 | 21 | 13 | 20 | 5 | 14 | 18 | 30 | 17 |
| | 5 | 29 | 21 | 15 | 38 | | | | | |
| 77 | 5 | 1 | 9 | -2 | 4 | 6 | 4 | -1 | 0 | 5 |
| | 8 | 6 | 7 | -3 | 4 | 12 | -5 | 7 | 10 | 12 |
| | 11 | 9 | 3 | 11 | 13 | 17 | 11 | 11 | 10 | -2 |
| | 13 | 17 | 17 | -7 | 8 | 11 | 8 | 13 | 4 | 10 |
| | 12 | -2 | 3 | 12 | 3 | 9 | 2 | 6 | 6 | 2 |
| | 6 | 2 | 1 | 6 | 16 | 6 | 5 | -1 | 13 | 10 |
| | 13 | 7 | 7 | 10 | 3 | 16 | 21 | 21 | 12 | 9 |
| | 26 | 16 | 19 | 17 | 21 | 13 | | | | |
| 78 | 6 | -8 | 4 | 0 | 3 | 7 | 9 | -13 | 16 | 10 |
| | 22 | 21 | 11 | 7 | 2 | 6 | -3 | 2 | 15 | 5 |
| | 15 | 15 | 14 | 13 | 4 | 9 | 9 | 24 | 25 | 12 |
| | -1 | 6 | 7 | -8 | 11 | 12 | 5 | 15 | 8 | 22 |
| | 17 | 3 | -5 | 14 | 23 | 15 | 16 | 12 | 7 | 15 |
| | 0 | -14 | 12 | 23 | 4 | 19 | -11 | -14 | 9 | 19 |
| | 19 | 30 | 24 | 16 | 12 | 9 | 11 | 24 | 26 | 10 |
| | 17 | 29 | 31 | 33 | 33 | 26 | 22 | | | |
| 79 | 10 | -14 | 10 | -3 | -4 | 16 | 7 | -13 | 20 | 14 |
| | 21 | 22 | 8 | 2 | -4 | 6 | -6 | 3 | 13 | 8 |
| | 12 | 17 | 14 | 11 | 10 | 13 | 11 | 27 | 24 | -0 |
| | 6 | 17 | 9 | -11 | 5 | 7 | -2 | 17 | 12 | 20 |
| | 15 | 4 | 2 | 17 | 25 | 20 | 9 | 17 | 14 | 23 |
| | -1 | -19 | 4 | 21 | 3 | 18 | -5 | -15 | 22 | 26 |
| | 19 | 25 | 27 | 16 | 16 | 10 | 23 | 19 | 27 | 2 |
| | 19 | 38 | 22 | 31 | 34 | 26 | 22 | 33 | | |
| 80 | 12 | -5 | 7 | -4 | 0 | 12 | 10 | -10 | 14 | 13 |
| | 19 | 20 | 11 | 7 | -2 | 10 | -5 | 3 | 16 | 8 |
| | 10 | 11 | 16 | 13 | 8 | 13 | 10 | 20 | 21 | 4 |
| | -1 | 9 | 6 | -14 | 10 | 6 | 4 | 17 | 12 | 18 |
| | 19 | 5 | -1 | 18 | 20 | 22 | 9 | 10 | 11 | 16 |
| | -0 | -17 | 5 | 20 | 5 | 19 | -7 | -14 | 15 | 23 |
| | 20 | 29 | 26 | 17 | 13 | 12 | 15 | 21 | 23 | 9 |
| | 13 | 36 | 25 | 24 | 34 | 27 | 18 | 41 | 40 | |
| 81 | -7 | 18 | -3 | 8 | -1 | -3 | 0 | 6 | 3 | 2 |
| | -9 | -5 | 2 | 13 | 24 | -18 | 16 | -1 | -2 | 2 |
| | 2 | 1 | -12 | -3 | -12 | 0 | -2 | -8 | -5 | 8 |
| | -6 | -15 | -15 | 29 | -2 | 4 | -4 | 2 | -3 | 1 |
| | -7 | 2 | 3 | -6 | -7 | -7 | 8 | -6 | -10 | -9 |
| | 0 | 13 | 10 | -7 | -10 | -7 | 3 | 19 | -10 | -1 |
| | -3 | 3 | -3 | 6 | -10 | -4 | -9 | 4 | -9 | 22 |
| | 11 | -12 | 15 | 7 | -8 | 9 | 7 | 10 | 6 | 9 |

### Table F4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 82 | 4 | 6 | 5 | 8 | 5 | 2 | 8 | - 3 | 0 | - 2 |
| | - 6 | - 2 | 5 | - 3 | - 1 | 12 | - 2 | 4 | 9 | 7 |
| | - 4 | 6 | 4 | - 0 | 14 | 13 | 6 | - 3 | 1 | - 6 |
| | 15 | 17 | 19 | -11 | 5 | 6 | 7 | - 0 | - 1 | - 3 |
| | 8 | - 1 | 1 | 9 | - 2 | 1 | - 5 | - 1 | 4 | 1 |
| | 5 | 8 | - 7 | - 1 | 13 | - 3 | 12 | 3 | 6 | 7 |
| | 2 | - 3 | - 1 | 3 | 0 | 18 | 16 | 12 | 8 | 11 |
| | 5 | 8 | 2 | 3 | 16 | 8 | 30 | 14 | 14 | 15 |
| | 1 | | | | | | | | | |
| 83 | 4 | -10 | 7 | - 6 | -10 | 9 | - 4 | -15 | 17 | 19 |
| | 10 | 9 | 3 | 5 | - 6 | 1 | 8 | - 2 | 11 | - 3 |
| | 2 | 19 | 15 | 2 | 4 | 18 | 11 | 19 | 13 | 6 |
| | 7 | 16 | 7 | 3 | 11 | 1 | 13 | 7 | 9 | 15 |
| | 13 | - 2 | - 3 | 16 | 12 | 14 | 18 | 14 | 7 | 21 |
| | 5 | -14 | 2 | 20 | - 1 | 3 | - 1 | - 7 | 16 | 16 |
| | 15 | 17 | 19 | 8 | 15 | 10 | 16 | 21 | 34 | 18 |
| | 8 | 30 | 17 | 8 | 35 | 41 | 14 | 22 | 28 | 26 |
| | 10 | 15 | | | | | | | | |
| 84 | - 1 | 7 | - 5 | 2 | - 6 | - 2 | - 2 | 3 | - 2 | 1 |
| | - 5 | - 7 | - 1 | 2 | 16 | -11 | 3 | 6 | 2 | - 1 |
| | 1 | - 1 | - 3 | 0 | - 3 | 4 | - 2 | - 8 | - 4 | 8 |
| | 4 | - 2 | - 4 | 15 | - 1 | 6 | 2 | 1 | - 1 | - 4 |
| | - 5 | 8 | 1 | - 0 | - 7 | - 4 | 5 | - 7 | - 9 | - 3 |
| | 3 | 15 | 6 | - 1 | - 5 | - 6 | 7 | 14 | - 7 | - 1 |
| | - 2 | - 3 | - 2 | 1 | - 7 | 3 | - 1 | 6 | - 2 | 13 |
| | 16 | - 1 | 4 | 5 | 1 | 8 | 13 | 7 | 15 | 12 |
| | 33 | 18 | 12 | | | | | | | |
| 85 | 7 | 4 | 3 | - 1 | - 9 | 4 | 2 | - 3 | 7 | 10 |
| | 3 | 1 | - 5 | 4 | 13 | -11 | 12 | - 5 | 7 | 1 |
| | - 1 | 10 | 2 | 3 | 1 | 11 | 13 | 5 | 5 | 5 |
| | 8 | - 5 | 2 | 17 | 3 | 3 | - 6 | - 2 | - 1 | 4 |
| | 4 | - 1 | 1 | 3 | - 2 | 3 | 11 | 5 | - 5 | - 2 |
| | 6 | 6 | 6 | 2 | - 1 | - 1 | 1 | 6 | 1 | 3 |
| | 2 | 7 | 6 | 8 | 1 | 4 | 10 | 20 | 11 | 22 |
| | 11 | 7 | 14 | 6 | 15 | 25 | 16 | 13 | 11 | 20 |
| | 23 | 18 | 30 | 30 | | | | | | |
| 86 | 5 | - 2 | 13 | - 3 | - 9 | 12 | - 2 | - 5 | 10 | 15 |
| | 10 | 9 | 4 | 3 | - 2 | - 1 | 3 | 4 | 10 | 2 |
| | 7 | 16 | 15 | 6 | 6 | 15 | 6 | 15 | 7 | 0 |
| | 10 | 16 | 11 | 1 | 16 | - 0 | - 9 | 8 | 3 | 4 |
| | 11 | 1 | 2 | 17 | 14 | 13 | 6 | 9 | 6 | 12 |
| | 11 | - 3 | - 3 | 7 | 3 | 7 | - 0 | - 1 | 14 | 14 |
| | 15 | 12 | 16 | 8 | 13 | 11 | 20 | 25 | 33 | 18 |
| | 9 | 23 | 15 | 13 | 25 | 24 | 18 | 21 | 29 | 25 |
| | 10 | 16 | 35 | 20 | 30 | | | | | |

## Table F4 Continued

### Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 87 | - 4 | 20 | - 6 | 14 | 2 | 0 | 5 | 11 | - 4 | - 4 |
| | - 9 | - 4 | - 8 | - 1 | 17 | - 4 | 9 | 12 | 0 | 6 |
| | 0 | - 0 | - 9 | 5 | 5 | 2 | 8 | -15 | - 4 | 3 |
| | 14 | 3 | 8 | 18 | 3 | 11 | 9 | - 5 | -11 | -11 |
| | - 6 | 6 | 10 | 4 | -13 | - 3 | 1 | -11 | - 5 | -16 |
| | 6 | 23 | 4 | -10 | 5 | - 4 | 7 | 20 | - 6 | - 6 |
| | - 3 | - 0 | - 7 | 7 | -11 | 7 | 3 | 7 | -11 | 17 |
| | 15 | -10 | 7 | 1 | - 6 | - 2 | 19 | 6 | 4 | 6 |
| | 31 | 28 | 10 | 39 | 34 | 19 | | | | |
| 88 | 9 | - 2 | 9 | - 2 | - 3 | 14 | 9 | - 9 | 12 | 8 |
| | 14 | 22 | 8 | - 2 | - 3 | 3 | -11 | 3 | 18 | 3 |
| | 16 | 5 | 12 | 17 | 11 | 12 | 10 | 22 | 16 | - 0 |
| | 7 | 15 | 10 | -12 | 9 | 6 | 0 | 14 | 13 | 12 |
| | 16 | 1 | - 2 | 17 | 18 | 18 | 9 | 11 | 5 | 15 |
| | 4 | -11 | 2 | 18 | 11 | 17 | - 3 | - 9 | 19 | 21 |
| | 20 | 22 | 22 | 18 | 15 | 7 | 23 | 19 | 21 | 6 |
| | 23 | 30 | 20 | 21 | 28 | 20 | 21 | 28 | 37 | 35 |
| | 7 | 18 | 23 | 19 | 19 | 28 | 18 | | | |
| 89 | - 5 | 16 | - 3 | 8 | 1 | - 3 | 2 | 13 | - 7 | - 6 |
| | -10 | - 9 | - 5 | 0 | 17 | - 7 | 7 | 5 | - 6 | 5 |
| | - 2 | - 4 | -12 | - 5 | - 3 | 3 | 2 | -19 | - 8 | - 1 |
| | 8 | - 7 | - 2 | 17 | - 3 | 3 | 5 | - 4 | - 6 | - 7 |
| | - 8 | 7 | 6 | - 1 | -15 | -11 | 2 | - 8 | -11 | -14 |
| | 6 | 24 | 1 | -12 | 4 | - 9 | 9 | 24 | - 9 | - 3 |
| | - 4 | -12 | - 8 | 1 | -13 | 6 | - 8 | 3 | -11 | 18 |
| | 9 | -14 | 12 | - 2 | - 8 | - 1 | 15 | 1 | 2 | 4 |
| | 39 | 22 | 3 | 39 | 31 | 12 | 51 | 10 | | |
| 90 | 2 | - 1 | - 2 | 3 | - 1 | 5 | 11 | - 4 | - 0 | 4 |
| | 6 | 6 | 3 | 4 | 9 | 3 | - 3 | 3 | 9 | 2 |
| | 16 | 7 | 2 | 15 | - 2 | 3 | 5 | 8 | 11 | 3 |
| | 7 | 5 | 5 | 1 | 9 | 14 | 8 | 6 | - 1 | 3 |
| | 3 | 6 | - 2 | 8 | 7 | 7 | 6 | 2 | 10 | 3 |
| | - 1 | - 1 | 12 | 5 | 0 | 6 | - 0 | 2 | 6 | 6 |
| | 12 | 12 | 10 | 10 | 1 | 2 | 9 | 9 | 5 | 4 |
| | 20 | 10 | 14 | 19 | 13 | 10 | 22 | 25 | 22 | 24 |
| | 14 | 11 | 11 | 27 | 18 | 18 | 26 | 33 | 24 | |
| 91 | 7 | - 4 | 8 | - 3 | -10 | 9 | - 0 | -11 | 18 | 14 |
| | 9 | 16 | 2 | 7 | 4 | - 3 | 2 | - 4 | 10 | 2 |
| | 6 | 10 | 6 | 6 | 5 | 21 | 9 | 17 | 14 | 2 |
| | 9 | 16 | 6 | 3 | 7 | 5 | - 6 | 4 | 8 | 14 |
| | 15 | 1 | - 5 | 10 | 9 | 12 | 13 | 13 | 7 | 18 |
| | 5 | -10 | 3 | 13 | 0 | 3 | - 6 | - 9 | 12 | 14 |
| | 14 | 14 | 17 | 13 | 13 | 6 | 18 | 21 | 31 | 19 |
| | 7 | 25 | 14 | 14 | 30 | 36 | 19 | 19 | 24 | 24 |
| | 12 | 16 | 41 | 17 | 34 | 34 | 15 | 32 | 11 | 22 |

### Table F4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 92 | 16 | -10 | 14 | - 8 | - 9 | 13 | 1 | -11 | 16 | 19 |
| | 12 | 13 | 7 | 4 | - 7 | 7 | - 0 | 1 | 15 | 4 |
| | 8 | 13 | 8 | 9 | 17 | 22 | 16 | 18 | 17 | - 1 |
| | 10 | 19 | 11 | - 4 | 3 | 11 | 2 | 5 | 13 | 13 |
| | 18 | - 0 | - 4 | 21 | 12 | 16 | 13 | 19 | 12 | 23 |
| | 11 | - 8 | - 6 | 18 | 9 | 6 | 0 | - 5 | 18 | 19 |
| | 15 | 12 | 17 | 10 | 18 | 17 | 22 | 19 | 30 | 7 |
| | 12 | 25 | 14 | 10 | 33 | 27 | 22 | 22 | 33 | 31 |
| | 5 | 17 | 36 | 13 | 25 | 29 | 11 | 32 | 13 | 25 |
| | 42 | | | | | | | | | |
| 93 | 4 | - 4 | 7 | - 3 | - 5 | 5 | 2 | -10 | 13 | 13 |
| | 10 | 10 | 2 | 4 | 0 | - 5 | 2 | - 2 | 8 | 7 |
| | 4 | 5 | 11 | 5 | 3 | 12 | 12 | 11 | 17 | 4 |
| | 5 | 14 | 7 | - 1 | 4 | - 2 | - 5 | 7 | 6 | 10 |
| | 11 | - 4 | - 4 | 15 | 5 | 11 | 13 | 9 | 9 | 12 |
| | 3 | - 5 | 2 | 14 | 4 | 7 | - 4 | - 1 | 17 | 16 |
| | 9 | 13 | 14 | 21 | 13 | 14 | 8 | 12 | 20 | 11 |
| | 8 | 19 | 14 | 11 | 26 | 22 | 12 | 21 | 22 | 23 |
| | 12 | 11 | 29 | 15 | 23 | 25 | 13 | 26 | 15 | 18 |
| | 36 | 34 | | | | | | | | |
| 94 | 4 | -12 | 8 | - 7 | - 5 | 4 | 0 | -12 | 15 | 7 |
| | 7 | 8 | 10 | 0 | - 3 | 4 | - 2 | - 2 | 7 | - 3 |
| | 6 | 6 | 8 | 5 | 3 | 12 | 9 | 11 | 11 | 1 |
| | 2 | 10 | 6 | - 3 | 5 | 2 | - 4 | 9 | 11 | 17 |
| | 12 | - 1 | - 7 | 6 | 9 | 12 | 9 | 13 | 4 | 18 |
| | 7 | -13 | - 2 | 18 | - 1 | 4 | - 5 | - 7 | 13 | 14 |
| | 9 | 11 | 16 | 9 | 14 | 9 | 12 | 13 | 20 | 4 |
| | 7 | 20 | 11 | 16 | 24 | 22 | 12 | 26 | 30 | 30 |
| | 2 | 15 | 25 | 14 | 14 | 26 | - 0 | 27 | 7 | 20 |
| | 33 | 32 | 27 | | | | | | | |
| 95 | 9 | - 6 | 6 | - 3 | 1 | 10 | 7 | -12 | 10 | 11 |
| | 12 | 16 | 15 | - 2 | - 2 | 4 | - 7 | 0 | 13 | 2 |
| | 11 | 8 | 12 | 5 | 2 | 15 | 10 | 18 | 15 | 4 |
| | 2 | 11 | 1 | - 8 | 8 | 4 | - 2 | 9 | 15 | 16 |
| | 17 | 4 | - 7 | 14 | 17 | 16 | 15 | 14 | 9 | 15 |
| | - 1 | -10 | 8 | 18 | 3 | 15 | - 6 | -11 | 17 | 21 |
| | 18 | 20 | 23 | 16 | 18 | 8 | 16 | 16 | 16 | 0 |
| | 12 | 26 | 21 | 17 | 24 | 22 | 17 | 27 | 28 | 35 |
| | 7 | 7 | 25 | 13 | 20 | 21 | 11 | 35 | 6 | 24 |
| | 31 | 34 | 31 | 36 | | | | | | |
| 96 | 4 | - 9 | 3 | - 8 | - 5 | 9 | 5 | -11 | 10 | 5 |
| | 13 | 10 | 9 | 2 | 1 | - 1 | - 9 | - 0 | 9 | - 1 |
| | 9 | 10 | 10 | 8 | 2 | 8 | 8 | 18 | 19 | 2 |
| | - 2 | 5 | - 2 | - 4 | 4 | 3 | - 3 | 8 | 5 | 11 |
| | 13 | 2 | - 3 | 14 | 12 | 14 | 13 | 10 | 6 | 10 |
| | - 2 | - 8 | 3 | 15 | - 0 | 14 | --6 | - 6 | 10 | 15 |
| | 16 | 17 | 18 | 9 | 6 | 8 | 12 | 16 | 14 | 7 |
| | 18 | 15 | 23 | 18 | 19 | 20 | 16 | 29 | 29 | 33 |
| | 13 | 9 | 22 | 23 | 28 | 19 | 19 | 33 | 19 | 33 |
| | 29 | 33 | 32 | 30 | 39 | | | | | |

### Table F4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 97 | -2 | 15 | -4 | 7 | -3 | -4 | -1 | 6 | -6 | -1 |
| | -13 | -9 | -4 | -1 | 7 | -4 | 9 | -1 | -1 | 4 |
| | -3 | -8 | -10 | -5 | -5 | 4 | 1 | -15 | -9 | -2 |
| | 5 | 1 | -1 | 11 | -1 | 4 | 5 | -5 | -5 | -3 |
| | -6 | 5 | 11 | 1 | -21 | -10 | 1 | -10 | -5 | -11 |
| | 5 | 23 | 2 | -9 | 3 | -10 | 11 | 22 | -7 | -7 |
| | -5 | -13 | -12 | 6 | -11 | 9 | -2 | 3 | -9 | 18 |
| | 10 | -12 | 5 | -4 | -5 | -1 | 12 | -3 | -6 | -0 |
| | 30 | 24 | 6 | 35 | 27 | 10 | 43 | 9 | 51 | 18 |
| | 17 | 11 | 18 | 10 | 11 | 19 | | | | |
| 98 | -3 | 9 | -7 | 3 | -6 | -5 | 2 | 5 | -10 | -6 |
| | -9 | -6 | -7 | 4 | 8 | -7 | 8 | 1 | -2 | 1 |
| | -4 | -8 | -9 | -3 | -6 | -1 | -0 | -10 | -8 | 3 |
| | 5 | 1 | 3 | 13 | -8 | 7 | 1 | -7 | -8 | -5 |
| | -10 | 3 | 8 | -4 | -14 | -11 | 6 | -6 | -6 | -9 |
| | 5 | 15 | 3 | -6 | 1 | -13 | 3 | 22 | -7 | -11 |
| | -6 | -3 | -8 | -2 | -9 | -1 | -3 | -3 | -10 | 14 |
| | 15 | -11 | 6 | -1 | -6 | -6 | 14 | 4 | -2 | 4 |
| | 29 | 15 | 4 | 33 | 28 | 11 | 41 | 10 | 47 | 24 |
| | 13 | 9 | 13 | 12 | 7 | 22 | 48 | | | |
| 99 | 15 | -7 | 14 | -2 | -0 | 10 | 7 | -8 | 11 | 6 |
| | 7 | 12 | 4 | -1 | -10 | 12 | -5 | 4 | 15 | 2 |
| | 7 | 8 | 18 | 5 | 17 | 13 | 20 | 16 | 10 | -6 |
| | 13 | 22 | 14 | -8 | 8 | 4 | 1 | 11 | 8 | 10 |
| | 14 | 3 | 0 | 19 | 6 | 14 | 5 | 14 | 14 | 19 |
| | 8 | -6 | -8 | 15 | 12 | 6 | 1 | -10 | 15 | 14 |
| | 13 | 13 | 21 | 10 | 17 | 14 | 27 | 13 | 23 | 4 |
| | 13 | 25 | 11 | 8 | 33 | 17 | 23 | 19 | 28 | 25 |
| | -9 | 25 | 24 | 13 | 15 | 27 | 12 | 31 | 3 | 23 |
| | 36 | 43 | 28 | 31 | 34 | 32 | 13 | 16 | | |
| 100 | -5 | 15 | -10 | 10 | 1 | -4 | 2 | 9 | -7 | -6 |
| | -10 | -9 | -4 | 4 | 20 | -11 | 8 | -1 | -3 | 3 |
| | 2 | -5 | -11 | -3 | -7 | -2 | 5 | -15 | -8 | 3 |
| | 6 | -3 | -3 | 16 | -6 | 6 | 2 | -3 | -7 | -6 |
| | -7 | 4 | 9 | -4 | -15 | -8 | 7 | -13 | -8 | -15 |
| | 5 | 23 | 8 | -8 | 1 | -4 | 7 | 23 | -6 | -6 |
| | -6 | -3 | -10 | 7 | -12 | 6 | -7 | 1 | -14 | 19 |
| | 11 | -14 | 10 | 2 | -14 | -2 | 13 | 3 | -1 | 5 |
| | 37 | 16 | 5 | 39 | 32 | 7 | 51 | 11 | 55 | 22 |
| | 13 | 9 | 19 | 6 | 13 | 22 | 52 | 53 | 11 | |

## Table F5

### Correlation Matrix by Rows Below Diagonal for SPS Item Scores 2, 5, 8, ---, 299

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 21 | | | | | | | | | |
| 3 | -10 | - 9 | | | | | | | | |
| 4 | 17 | 31 | -11 | | | | | | | |
| 5 | 21 | 23 | - 9 | 24 | | | | | | |
| 6 | 29 | 23 | -13 | 28 | 30 | | | | | |
| 7 | 26 | 22 | - 3 | 29 | 25 | 34 | | | | |
| 8 | 29 | 22 | -16 | 25 | 22 | 34 | 31 | | | |
| 9 | 5 | 6 | 11 | 9 | 8 | 2 | 9 | 6 | | |
| 10 | 34 | 25 | -13 | 19 | 17 | 32 | 21 | 40 | 8 | |
| 11 | 24 | 14 | 3 | 18 | 20 | 26 | 33 | 19 | 7 | 27 |
| 12 | 17 | 18 | -10 | 23 | 21 | 30 | 26 | 20 | 6 | 26 |
| | 24 | | | | | | | | | |
| 13 | 31 | 29 | -14 | 23 | 22 | 37 | 37 | 38 | 4 | 36 |
| | 30 | 29 | | | | | | | | |
| 14 | 15 | 12 | 4 | 11 | 12 | 17 | 19 | 21 | 12 | 14 |
| | 21 | 12 | 19 | | | | | | | |
| 15 | 8 | 3 | 13 | 5 | - 0 | 5 | 12 | 12 | 26 | 10 |
| | 14 | 6 | 7 | 20 | | | | | | |
| 16 | 21 | 16 | - 1 | 15 | 11 | 18 | 15 | 30 | 23 | 28 |
| | 17 | 9 | 24 | 41 | 27 | | | | | |
| 17 | 19 | 26 | -11 | 17 | 19 | 23 | 22 | 36 | 12 | 34 |
| | 18 | 21 | 32 | 22 | 12 | 33 | | | | |
| 18 | 12 | 12 | 7 | 11 | 3 | 4 | 8 | 13 | 13 | 10 |
| | 17 | 5 | 11 | 11 | 11 | 21 | 24 | | | |
| 19 | 0 | 4 | 16 | 2 | 3 | 3 | 3 | 7 | 10 | 6 |
| | 10 | 5 | - 2 | 9 | 18 | 14 | 18 | 15 | | |
| 20 | 22 | 15 | 4 | 13 | 13 | 19 | 20 | 20 | 17 | 25 |
| | 15 | 9 | 19 | 14 | 14 | 24 | 27 | 22 | 6 | |
| 21 | 19 | 16 | 4 | 14 | 15 | 27 | 23 | 16 | 7 | 17 |
| | 39 | 21 | 32 | 20 | 11 | 17 | 17 | 14 | 6 | 23 |
| 22 | 27 | 24 | -24 | 25 | 23 | 32 | 31 | 39 | - 4 | 46 |
| | 23 | 27 | 43 | 17 | 2 | 22 | 38 | 11 | - 0 | 26 |
| | 26 | | | | | | | | | |
| 23 | - 2 | 1 | 12 | - 2 | 2 | - 1 | 1 | - 2 | 0 | - 3 |
| | 6 | - 2 | 2 | - 1 | 11 | - 1 | - 3 | - 3 | 8 | - 1 |
| | 5 | - 4 | | | | | | | | |
| 24 | 25 | 20 | -13 | 20 | 11 | 22 | 18 | 32 | 9 | 30 |
| | 18 | 15 | 28 | 17 | 6 | 31 | 30 | 17 | 3 | 24 |
| | 16 | 34 | - 5 | | | | | | | |
| 25 | 18 | 18 | -12 | 14 | 14q | 23 | 23 | 30 | 7 | 29 |
| | 15 | 13 | 24 | 14 | 7 | 25 | 35 | 15 | 6 | 24 |
| | 11 | 38 | - 4 | 33 | | | | | | |

## Table F5 Continued

### Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 0 | - 3 | 9 | 2 | 0 | - 2 | 7 | 8 | 21 | - 1 |
| | 4 | 0 | 3 | 11 | 23 | 14 | 11 | 3 | 11 | 7 |
| | - 2 | 3 | 7 | 4 | - 3 | | | | | |
| 27 | 23 | 18 | -17 | 10 | 13 | 20 | 18 | 40 | 6 | 35 |
| | 18 | 18 | 28 | 15 | 8 | 29 | 44 | 24 | 7 | 25 |
| | 17 | 42 | - 6 | 40 | 40 | 5 | | | | |
| 28 | 15 | 13 | - 6 | 14 | 16 | 28 | 19 | 23 | - 4 | 20 |
| | 21 | 22 | 34 | 14 | - 0 | 8 | 13 | 2 | 0 | 9 |
| | 24 | 27 | 3 | 13 | 14 | - 2 | 19 | | | |
| 29 | 25 | 17 | -14 | 16 | 25 | 27 | 23 | 24 | 0 | 25 |
| | 23 | 29 | 29 | 12 | 1 | 11 | 24 | 4 | - 5 | 13 |
| | 19 | 32 | - 1 | 31 | 30 | - 5 | 31 | 28 | | |
| 30 | 15 | 11 | - 3 | 11 | 8 | 27 | 23 | 15 | 0 | 22 |
| | 22 | 21 | 22 | 14 | 6 | 5 | 8 | 4 | - 3 | 13 |
| | 23 | 25 | 1 | 19 | 17 | - 8 | 19 | 19 | 29 | |
| 31 | 14 | 13 | -11 | 25 | 18 | 26 | 17 | 21 | 7 | 21 |
| | 22 | 22 | 22 | 16 | 2 | 22 | 25 | 7 | 7 | 14 |
| | 18 | 23 | 5 | 27 | 24 | 2 | 24 | 22 | 30 | 22 |
| 32 | - 1 | - 2 | 14 | 0 | - 3 | -11 | 3 | - 2 | 8 | - 3 |
| | 6 | - 6 | - 2 | 2 | 16 | 3 | - 0 | 13 | 15 | 10 |
| | - 3 | - 6 | 11 | 1 | - 2 | 14 | - 2 | - 3 | - 7 | - 5 |
| | 1 | | | | | | | | | |
| 33 | 6 | 13 | - 7 | 2 | 14 | 7 | 4 | 10 | 5 | 11 |
| | 6 | 4 | 5 | 7 | 2 | 13 | 13 | 0 | 7 | 4 |
| | 7 | 11 | 1 | 12 | 16 | - 1 | 11 | 4 | 10 | 9 |
| | 14 | - 1 | | | | | | | | |
| 34 | 17 | 21 | -17 | 19 | 17 | 17 | 18 | 29 | 1 | 28 |
| | 9 | 18 | 21 | 9 | 5 | 13 | 30 | 18 | 11 | 21 |
| | 8 | 29 | 2 | 26 | 27 | 5 | 30 | 9 | 23 | 11 |
| | 23 | 4 | 13 | | | | | | | |
| 35 | 15 | 12 | -13 | 18 | 13 | 15 | 15 | 15 | 11 | 25 |
| | 14 | 11 | 18 | 15 | 9 | 19 | 25 | 4 | 8 | 12 |
| | 10 | 23 | 10 | 18 | 20 | 8 | 22 | 11 | 17 | 10 |
| | 20 | 7 | 17 | 28 | | | | | | |
| 36 | 26 | 15 | -11 | 16 | 15 | 23 | 20 | 32 | 10 | 29 |
| | 18 | 11 | 25 | 14 | 2 | 25 | 30 | 20 | 0 | 25 |
| | 16 | 33 | - 3 | 36 | 35 | 2 | 39 | 9 | 23 | 22 |
| | 21 | - 7 | 14 | 27 | 22 | | | | | |
| 37 | 14 | 8 | - 5 | 16 | 12 | 11 | 11 | 18 | 12 | 19 |
| | 15 | 3 | 12 | 16 | 9 | 22 | 17 | 16 | 8 | 21 |
| | 11 | 14 | 2 | 17 | 18 | 12 | 22 | 5 | 13 | 9 |
| | 19 | 6 | 10 | 21 | 18 | 24 | | | | |
| 38 | 9 | 8 | - 7 | 14 | 17 | 19 | 15 | 19 | - 2 | 21 |
| | 17 | 21 | 19 | 6 | 9 | 17 | 16 | 6 | 7 | 9 |
| | 17 | 21 | 7 | 16 | 17 | - 3 | 18 | 18 | 22 | 19 |
| | 20 | 5 | 11 | 15 | 18 | 16 | 16 | | | |

## Table F5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | - 3 | 0 | 3 | 6 | 9 | 11 | 6 | - 3 | 7 | 1 |
| | 9 | 13 | 9 | 1 | 6 | - 2 | 1 | - 8 | 7 | - 5 |
| | 14 | 5 | 6 | - 8 | 3 | 5 | - 3 | 15 | 5 | 10 |
| | 15 | 3 | 7 | 0 | 16 | - 3 | 3 | 15 | | |
| 40 | 17 | 17 | - 6 | 24 | 21 | 27 | 22 | 23 | 4 | 27 |
| | 22 | 16 | 26 | 16 | 5 | 20 | 21 | 9 | 6 | 12 |
| | 18 | 35 | 2 | 17 | 24 | - 1 | 23 | 21 | 27 | 16 |
| | 20 | - 4 | 4 | 25 | 21 | 23 | 15 | 21 | 13 | |
| 41 | 25 | 20 | -16 | 20 | 18 | 24 | 18 | 38 | 7 | 34 |
| | 10 | 18 | 27 | 13 | 3 | 26 | 35 | 12 | 3 | 25 |
| | 10 | 40 | - 7 | 42 | 42 | 3 | 41 | 14 | 30 | 20 |
| | 21 | - 3 | 15 | 30 | 17 | 47 | 22 | 22 | - 3 | 26 |
| 42 | 13 | 11 | - 1 | 8 | 9 | 17 | 17 | 7 | 7 | 13 |
| | 20 | 14 | 15 | 13 | 12 | 11 | 3 | - 3 | 5 | 4 |
| | 20 | 3 | 2 | 7 | 7 | 5 | 3 | 15 | 11 | 20 |
| | 12 | 3 | 7 | 2 | 9 | 7 | 7 | 9 | 15 | 12 |
| | 6 | | | | | | | | | |
| 43 | 13 | 12 | - 7 | 16 | 9 | 21 | 19 | 18 | 7 | 24 |
| | 17 | 16 | 19 | 14 | 5 | 24 | 23 | 17 | 7 | 16 |
| | 18 | 25 | - 3 | 26 | 22 | 7 | 27 | 17 | 19 | 20 |
| | 27 | - 2 | 9 | 24 | 17 | 27 | 20 | 19 | 0 | 26 |
| | 29 | 11 | | | | | | | | |
| 44 | 18 | 12 | - 9 | 13 | 17 | 21 | 18 | 21 | 5 | 23 |
| | 21 | 16 | 24 | 14 | 11 | 16 | 20 | 10 | 10 | 18 |
| | 20 | 27 | 6 | 18 | 22 | 4 | 21 | 21 | 19 | 14 |
| | 17 | 1 | 6 | 24 | 21 | 19 | 10 | 17 | 11 | 33 |
| | 22 | 12 | 22 | | | | | | | |
| 45 | 21 | 15 | -14 | 17 | 17 | 29 | 22 | 25 | - 3 | 24 |
| | 22 | 23 | 32 | 13 | - 0 | 12 | 19 | 6 | 1 | 9 |
| | 23 | 31 | 7 | 26 | 23 | - 5 | 25 | 27 | 26 | 27 |
| | 23 | 2 | 7 | 22 | 20 | 28 | 10 | 20 | 8 | 27 |
| | 23 | 13 | 26 | 29 | | | | | | |
| 46 | 12 | 11 | - 7 | 19 | 14 | 19 | 18 | 13 | 8 | 19 |
| | 20 | 22 | 17 | 14 | 13 | 12 | 19 | 4 | 4 | 16 |
| | 20 | 21 | 5 | 21 | 12 | 8 | 17 | 21 | 22 | 19 |
| | 28 | 4 | 8 | 15 | 21 | 18 | 16 | 21 | 17 | 19 |
| | 17 | 17 | 23 | 21 | 26 | | | | | |
| 47 | 20 | 17 | -18 | 22 | 18 | 28 | 26 | 24 | 2 | 24 |
| | 30 | 18 | 27 | 17 | - 1 | 15 | 21 | 10 | - 0 | 11 |
| | 24 | 32 | 3 | 16 | 22 | - 3 | 23 | 23 | 27 | 25 |
| | 28 | - 7 | 12 | 19 | 21 | 23 | 16 | 24 | 11 | 33 |
| | 22 | 22 | 29 | 24 | 37 | 32 | | | | |
| 48 | 12 | 7 | - 1 | 14 | 4 | 7 | 10 | 19 | 19 | 20 |
| | 14 | 2 | 13 | 33 | 17 | 38 | 20 | 17 | 10 | 16 |
| | 7 | 12 | 1 | 21 | 18 | 16 | 23 | 5 | 1 | 6 |
| | 15 | 9 | 8 | 15 | 13 | 19 | 20 | 5 | 4 | 17 |
| | 16 | 11 | 19 | 21 | 10 | 18 | 15 | | | |

## Table F5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 49 | - 3 | 3 | 13 | 3 | - 2 | - 4 | 2 | - 3 | 10 | 2 |
| | 1 | - 6 | - 1 | 7 | 19 | 12 | 13 | 14 | 13 | 8 |
| | - 1 | - 1 | 4 | 4 | 7 | 13 | 4 | - 4 | - 5 | - 9 |
| | 8 | 22 | 4 | 9 | 14 | 2 | 8 | 3 | - 0 | 3 |
| | 2 | 5 | 9 | 13 | 3 | 11 | - 4 | 22 | | |
| 50 | 11 | 8 | - 9 | 5 | 9 | 10 | 9 | 18 | 6 | 16 |
| | 7 | 8 | 8 | 4 | 1 | 14 | 18 | 12 | 1 | 12 |
| | 1 | 20 | - 3 | 16 | 19 | 3 | 28 | 10 | 16 | 3 |
| | 16 | 3 | 6 | 20 | 14 | 19 | 13 | 12 | 1 | 11 |
| | 23 | - 1 | 20 | 11 | 13 | 12 | 17 | 18 | 12 | |
| 51 | 12 | - 2 | 3 | 6 | 2 | 0 | 11 | 8 | 6 | 8 |
| | 10 | 0 | 2 | 10 | 13 | 10 | 13 | 11 | 18 | 9 |
| | 2 | 6 | 4 | 11 | 14 | 14 | 14 | 0 | 2 | 2 |
| | 9 | 13 | 5 | 14 | 12 | 11 | 13 | 8 | 8 | 4 |
| | 11 | 5 | 9 | 16 | 9 | 10 | 8 | 14 | 22 | 13 |
| 52 | 19 | 9 | - 5 | 16 | 12 | 15 | 13 | 20 | 1 | 12 |
| | 14 | 11 | 16 | 9 | 6 | 19 | 26 | 18 | 12 | 21 |
| | 12 | 19 | 2 | 20 | 22 | 8 | 18 | 7 | 13 | 9 |
| | 16 | 5 | 7 | 28 | 12 | 23 | 23 | 13 | 0 | 19 |
| | 29 | 1 | 23 | 19 | 16 | 18 | 20 | 20 | 14 | 20 |
| | 15 | | | | | | | | | |
| 53 | - 1 | 2 | 13 | 2 | - 1 | - 7 | - 2 | - 6 | 10 | - 2 |
| | 2 | - 3 | - 4 | - 1 | 14 | - 3 | - 0 | 7 | 11 | - 1 |
| | 0 | -10 | 16 | - 5 | -11 | 8 | - 5 | - 7 | - 4 | - 2 |
| | - 2 | 23 | - 4 | 6 | 7 | -12 | 3 | 4 | 1 | - 5 |
| | - 9 | 9 | 2 | 5 | - 1 | 8 | - 3 | 10 | 23 | 6 |
| | 12 | 1 | | | | | | | | |
| 54 | 17 | 13 | -16 | 21 | 23 | 27 | 20 | 20 | 3 | 22 |
| | 17 | 17 | 23 | 8 | 3 | 16 | 21 | - 0 | 3 | 11 |
| | 22 | 24 | 6 | 14 | 19 | 6 | 10 | 20 | 23 | 18 |
| | 31 | - 3 | 10 | 16 | 20 | 19 | 12 | 26 | 22 | 23 |
| | 27 | 18 | 28 | 24 | 24 | 33 | 30 | 13 | 2 | 9 |
| | 13 | 22 | 2 | | | | | | | |
| 55 | 0 | 2 | 8 | 1 | - 6 | - 8 | - 3 | 2 | 9 | 6 |
| | 4 | - 8 | - 2 | 4 | 7 | 7 | - 3 | 13 | 1 | 7 |
| | 2 | - 4 | 2 | 6 | - 3 | 0 | 3 | 3 | - 4 | - 3 |
| | - 6 | 19 | - 5 | - 2 | 1 | - 2 | 3 | - 1 | - 5 | - 5 |
| | - 2 | 5 | - 1 | - 2 | - 1 | 6 | - 6 | 12 | 17 | 10 |
| | 13 | 4 | 10 | - 3 | | | | | | |
| 56 | - 8 | - 1 | 13 | 2 | - 9 | - 8 | - 4 | - 9 | - 2 | - 3 |
| | 1 | - 5 | -10 | - 5 | 1 | - 7 | - 6 | 13 | 9 | 0 |
| | 2 | -10 | 7 | 6 | 0 | 1 | 0 | 3 | - 4 | 2 |
| | - 0 | 12 | - 4 | 5 | - 6 | - 3 | 2 | - 6 | - 2 | - 7 |
| | - 4 | 0 | - 1 | - 1 | 1 | 2 | - 0 | 3 | 10 | 3 |
| | 5 | 2 | 17 | -11 | 23 | | | | | |

Table F5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57 | -1 | -6 | 19 | -2 | -11 | -11 | -8 | -9 | 6 | -7 |
| | 1 | -11 | -6 | 2 | 6 | -6 | -12 | 12 | 3 | 1 |
| | -1 | -12 | 4 | 0 | -13 | 2 | -9 | -2 | -10 | -4 |
| | -11 | 15 | -13 | -8 | -15 | -11 | -3 | -11 | -8 | -9 |
| | -12 | -2 | -9 | -1 | -4 | -2 | -7 | 7 | 11 | 5 |
| | 8 | 2 | 16 | -13 | 38 | 34 | | | | |
| 58 | 7 | 14 | 0 | 12 | 7 | 21 | 19 | 15 | 9 | 12 |
| | 18 | 10 | 22 | 12 | 12 | 18 | 17 | 13 | 3 | 15 |
| | 21 | 14 | -1 | 22 | 13 | 4 | 22 | 12 | 14 | 17 |
| | 17 | 11 | 2 | 17 | 5 | 17 | 13 | 11 | 4 | 13 |
| | 14 | 13 | 33 | 24 | 23 | 17 | 23 | 17 | 16 | 12 |
| | 14 | 14 | 5 | 13 | 7 | 5 | 12 | | | |
| 59 | 15 | 12 | -15 | 16 | 9 | 16 | 14 | 27 | 6 | 21 |
| | 12 | 11 | 18 | 11 | 1 | 20 | 26 | 16 | 5 | 12 |
| | 11 | 23 | -4 | 35 | 24 | 7 | 32 | 16 | 14 | 13 |
| | 20 | 3 | 7 | 20 | 19 | 26 | 20 | 12 | 2 | 20 |
| | 32 | 5 | 27 | 17 | 27 | 17 | 24 | 24 | 12 | 23 |
| | 13 | 23 | -2 | 17 | 10 | 4 | 4 | 26 | | |
| 60 | 2 | 4 | 7 | 6 | -1 | 7 | 13 | 4 | 3 | 3 |
| | 14 | 1 | 10 | 13 | 10 | 12 | 5 | 9 | 5 | 5 |
| | 16 | 7 | 5 | 12 | 8 | 4 | 8 | 13 | 7 | 14 |
| | 7 | 8 | -0 | 3 | 1 | 7 | 6 | 5 | 7 | 6 |
| | 2 | 18 | 14 | 11 | 13 | 12 | 16 | 17 | 11 | 9 |
| | 10 | 6 | 8 | 8 | 15 | 15 | 22 | 28 | 21 | |
| 61 | 20 | 15 | -15 | 18 | 29 | 27 | 25 | 24 | -0 | 26 |
| | 25 | 28 | 28 | 12 | 2 | 9 | 23 | 5 | 3 | 14 |
| | 15 | 29 | 1 | 21 | 23 | 3 | 22 | 23 | 24 | 21 |
| | 22 | -6 | 18 | 26 | 19 | 23 | 16 | 29 | 10 | 27 |
| | 33 | 13 | 25 | 25 | 33 | 32 | 34 | 10 | -0 | 11 |
| | 14 | 25 | -2 | 32 | -3 | 1 | -4 | 20 | 30 | 7 |
| 62 | -4 | -7 | 15 | 1 | -4 | -12 | -1 | -12 | 5 | -10 |
| | -1 | -7 | -5 | -3 | 11 | -3 | -3 | 8 | 6 | 2 |
| | 1 | -5 | 7 | -6 | -7 | 8 | -8 | -4 | -6 | -1 |
| | -5 | 19 | 0 | -7 | -0 | -11 | 1 | -2 | 2 | -9 |
| | -17 | -1 | -5 | 4 | 2 | 5 | -2 | 9 | 19 | 4 |
| | 16 | -2 | 18 | -2 | 20 | 20 | 26 | 11 | 5 | 18 |
| | 0 | | | | | | | | | |
| 63 | 9 | 6 | -1 | 9 | 14 | 17 | 20 | 19 | 3 | 11 |
| | 19 | 15 | 21 | 8 | 7 | 9 | 10 | 8 | 5 | 7 |
| | 17 | 17 | 7 | 12 | 20 | -2 | 14 | 26 | 23 | 17 |
| | 18 | -4 | 10 | 14 | 11 | 13 | -2 | 17 | 13 | 14 |
| | 13 | 13 | 18 | 25 | 30 | 18 | 29 | 14 | 2 | 9 |
| | 11 | 14 | -2 | 25 | 4 | 12 | 4 | 18 | 25 | 20 |
| | 31 | 14 | | | | | | | | |

Table F5 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 64 | 7 | 8 | 3 | 9 | 6 | 9 | 16 | 10 | 2 | 7 |
| | 13 | 8 | 11 | 14 | 11 | 9 | 5 | 11 | - 2 | 8 |
| | 19 | 10 | - 3 | 6 | 9 | - 0 | 14 | 11 | 14 | 22 |
| | 8 | 7 | 1 | 5 | 3 | 11 | 7 | 8 | 12 | 12 |
| | 7 | 19 | 10 | 20 | 21 | 15 | 19 | 13 | 5 | 6 |
| | 10 | 6 | 12 | 16 | 15 | 9 | 16 | 24 | 16 | 25 |
| | 15 | 18 | 22 | | | | | | | |
| 65 | - 2 | 0 | 6 | - 1 | - 4 | -11 | - 3 | - 4 | 3 | - 2 |
| | - 3 | -11 | -10 | 6 | 11 | 2 | 7 | 9 | 5 | 6 |
| | - 3 | - 5 | 4 | - 2 | 3 | 9 | - 2 | - 8 | - 6 | -10 |
| | - 6 | 14 | - 2 | 4 | - 1 | - 0 | 8 | - 2 | 2 | - 0 |
| | 2 | - 4 | - 2 | 5 | - 0 | - 4 | 1 | 5 | 22 | 10 |
| | 16 | 9 | 14 | - 1 | 18 | 15 | 19 | 5 | 10 | 7 |
| | - 1 | 24 | 3 | 11 | | | | | | |
| 66 | - 1 | 0 | 7 | 7 | - 3 | - 7 | 8 | - 1 | 13 | - 2 |
| | 7 | 0 | 3 | 7 | 7 | 7 | 1 | 7 | 6 | 4 |
| | 5 | - 6 | 5 | - 1 | - 3 | 13 | 0 | 0 | - 2 | 2 |
| | 8 | 10 | 2 | 7 | 3 | -10 | 7 | - 0 | 8 | 2 |
| | - 7 | 6 | 8 | 4 | - 3 | 7 | 6 | 16 | 12 | 9 |
| | 10 | 6 | 14 | 0 | 9 | 9 | 10 | 10 | 9 | 11 |
| | 1 | 16 | 10 | 14 | 14 | | | | | |
| 67 | 9 | 5 | - 2 | 7 | 2 | 4 | 4 | 11 | 9 | 8 |
| | 9 | 0 | 13 | 8 | 5 | 13 | 11 | 9 | 4 | 11 |
| | 6 | 10 | 0 | 14 | 10 | 8 | 13 | 2 | 6 | 1 |
| | 9 | 2 | 4 | 13 | 8 | 10 | 7 | 6 | - 6 | 4 |
| | 8 | 1 | 8 | - 0 | 8 | 8 | 7 | 14 | 14 | 13 |
| | 5 | 11 | 4 | 3 | 12 | 1 | 7 | 5 | 11 | 7 |
| | 2 | 1 | 2 | 8 | 5 | 13 | | | | |
| 68 | - 1 | - 1 | 9 | 10 | - 3 | - 4 | - 1 | - 4 | 4 | - 1 |
| | 6 | - 4 | - 7 | - 0 | 8 | 8 | 2 | 15 | 11 | 9 |
| | - 0 | 1 | 3 | 2 | - 1 | 12 | - 3 | 2 | 0 | - 4 |
| | - 0 | 16 | - 3 | 11 | - 2 | - 2 | 3 | - 1 | - 1 | 0 |
| | 0 | - 3 | 1 | - 0 | - 5 | - 2 | - 4 | 6 | 15 | 7 |
| | 13 | 7 | 13 | - 2 | 20 | 18 | 21 | 5 | 2 | 10 |
| | - 0 | 12 | 7 | - 0 | 14 | 10 | 9 | | | |
| 69 | 21 | 15 | -16 | 14 | 13 | 13 | 19 | 25 | 8 | 26 |
| | 17 | 17 | 22 | 15 | 3 | 20 | 26 | 15 | 5 | 15 |
| | 13 | 32 | - 2 | 30 | 18 | 4 | 28 | 10 | 22 | 10 |
| | 20 | - 4 | 9 | 24 | 18 | 37 | 12 | 12 | - 1 | 19 |
| | 27 | 2 | 23 | 15 | 24 | 14 | 25 | 17 | - 3 | 14 |
| | 2 | 15 | -12 | 15 | - 6 | - 8 | -10 | 13 | 24 | 6 |
| | 19 | -13 | 12 | 5 | - 3 | 4 | 16 | 2 | | |

**Table F5 Continued**

**Factor**

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 | 10 | 13 | - 2 | 12 | 8 | 11 | 14 | 15 | 7 | 15 |
| | 16 | 11 | 18 | 16 | 4 | 13 | 17 | 15 | 8 | 15 |
| | 12 | 13 | - 4 | 18 | 13 | 0 | 14 | 14 | 14 | 8 |
| | 15 | 1 | 3 | 16 | 8 | 14 | 7 | 11 | 0 | 9 |
| | 14 | 2 | 15 | 12 | 10 | 9 | 9 | 10 | 7 | 6 |
| | 3 | 11 | - 3 | 9 | 4 | 9 | 1 | 14 | 17 | 14 |
| | 17 | 3 | 16 | 8 | 4 | 1 | 12 | 11 | 20 | |
| 71 | 15 | 6 | - 8 | 9 | 11 | 11 | 13 | 17 | 9 | 17 |
| | 17 | 12 | 18 | 9 | 12 | 17 | 18 | 8 | 3 | 16 |
| | 10 | 16 | 2 | 12 | 8 | 9 | 15 | 12 | 12 | 16 |
| | 20 | 0 | 3 | 14 | 13 | 10 | 8 | 11 | 3 | 14 |
| | 9 | 6 | 17 | 16 | 11 | 16 | 20 | 13 | 2 | - 0 |
| | 8 | 8 | - 3 | 20 | - 4 | - 7 | - 6 | 17 | 16 | 7 |
| | 14 | - 7 | 11 | 12 | - 3 | 14 | 14 | 8 | 30 | 20 |
| 72 | - 9 | - 2 | 20 | - 7 | -18 | -14 | - 9 | -19 | 5 | -10 |
| | - 6 | - 8 | -12 | - 1 | 6 | - 3 | -10 | 5 | 3 | - 4 |
| | - 6 | -19 | - 0 | - 6 | -11 | 4 | -10 | - 9 | -10 | - 6 |
| | - 7 | 12 | - 6 | - 5 | -15 | -16 | - 5 | - 7 | 0 | -18 |
| | -15 | 1 | -11 | -15 | -16 | - 7 | -16 | 3 | 13 | - 5 |
| | 1 | - 2 | 15 | -15 | 17 | 21 | 22 | 7 | - 5 | 14 |
| | -14 | 21 | - 3 | 5 | 12 | 14 | 6 | 27 | -13 | 8 |
| | - 3 | | | | | | | | | |
| 73 | 3 | 3 | 5 | 2 | - 3 | 4 | 5 | - 2 | 8 | 1 |
| | 8 | 0 | 3 | 8 | 13 | 2 | 6 | 0 | 5 | 0 |
| | 5 | 0 | 7 | - 3 | 2 | 7 | 1 | 6 | 3 | 2 |
| | 9 | 6 | 2 | 3 | 2 | - 2 | 3 | 7 | 11 | 8 |
| | - 2 | 12 | 6 | 9 | 0 | 6 | 7 | 5 | 11 | - 3 |
| | 10 | - 2 | 10 | 6 | 2 | 4 | 6 | 9 | 1 | 14 |
| | 4 | 11 | 12 | 13 | 7 | 17 | 11 | 13 | - 0 | 10 |
| | 16 | 14 | | | | | | | | |
| 74 | 20 | 8 | - 6 | 10 | 10 | 12 | 14 | 10 | 8 | 15 |
| | 18 | 8 | 15 | 7 | 2 | 10 | 15 | 12 | 1 | 16 |
| | 13 | 15 | - 1 | 19 | 15 | 3 | 21 | 7 | 17 | 18 |
| | 14 | - 7 | 10 | 12 | 7 | 23 | 16 | 10 | 3 | 15 |
| | 18 | 6 | 15 | 7 | 14 | 10 | 17 | 4 | - 6 | 4 |
| | 0 | 15 | -11 | 11 | 0 | - 5 | - 6 | 12 | 15 | 6 |
| | 20 | - 8 | 9 | 6 | - 4 | 4 | 11 | 7 | 31 | 16 |
| | 22 | - 4 | 9 | | | | | | | |
| 75 | 18 | 8 | -10 | 14 | 12 | 9 | 10 | 20 | 7 | 19 |
| | 20 | 14 | 16 | 9 | 10 | 22 | 23 | 17 | 8 | 13 |
| | 9 | 19 | 1 | 21 | 16 | 9 | 24 | 6 | 17 | 5 |
| | 20 | 0 | 9 | 21 | 16 | 24 | 16 | 12 | - 2 | 16 |
| | 19 | - 3 | 16 | 15 | 11 | 12 | 18 | 18 | 8 | 14 |
| | 8 | 19 | - 2 | 11 | - 0 | - 1 | - 9 | 16 | 15 | - 0 |
| | 18 | - 3 | 9 | 1 | 2 | 7 | 18 | 8 | 38 | 12 |
| | 25 | - 4 | 11 | 31 | | | | | | |

## Table F5 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 76 | 3 | 1 | 6 | 7 | 5 | 9 | 7 | 3 | 8 | 3 |
| | 9 | 9 | 2 | -0 | 5 | 7 | 6 | 9 | 5 | 6 |
| | 6 | -2 | 2 | 7 | 5 | -2 | 6 | 2 | 11 | 5 |
| | 14 | 7 | -2 | 4 | 3 | 8 | 6 | 5 | 4 | 6 |
| | 3 | 6 | 6 | 4 | 4 | 6 | 4 | 6 | 8 | -1 |
| | 4 | 8 | 2 | -2 | 0 | 5 | 2 | 17 | 7 | 12 |
| | 4 | 4 | 11 | 6 | 4 | 9 | 3 | 14 | 5 | 14 |
| | 3 | 18 | 14 | 15 | 14 | | | | | |
| 77 | 12 | 13 | -5 | 8 | 6 | 14 | 6 | 13 | 1 | 14 |
| | 13 | 11 | 12 | 6 | -0 | 7 | 13 | 15 | 3 | 15 |
| | 8 | 12 | -2 | 21 | 16 | -3 | 16 | 9 | 12 | 15 |
| | 13 | 0 | 4 | 15 | 9 | 26 | 14 | 11 | -2 | 7 |
| | 22 | 3 | 12 | 10 | 10 | 15 | 15 | 6 | 1 | 10 |
| | 6 | 13 | -4 | 6 | 5 | 0 | 0 | 14 | 18 | 9 |
| | 19 | -3 | 10 | 4 | 2 | -3 | 6 | 8 | 30 | 19 |
| | 11 | 5 | -2 | 37 | 25 | 22 | | | | |
| 78 | 14 | 14 | -12 | 15 | 17 | 25 | 19 | 20 | -3 | 13 |
| | 14 | 18 | 22 | 7 | 1 | 6 | 13 | 5 | 1 | 9 |
| | 13 | 21 | -3 | 14 | 13 | -2 | 18 | 19 | 20 | 23 |
| | 25 | -10 | 11 | 17 | 11 | 20 | 11 | 13 | 10 | 15 |
| | 21 | 8 | 20 | 14 | 15 | 17 | 26 | 3 | -8 | 7 |
| | 3 | 16 | -11 | 22 | -12 | -9 | -16 | 13 | 11 | 3 |
| | 27 | -10 | 20 | 6 | -6 | -2 | 6 | -2 | 27 | 18 |
| | 26 | -10 | 10 | 29 | 32 | 14 | 25 | | | |
| 79 | 12 | 6 | -9 | 5 | 10 | 23 | 12 | 12 | -5 | 13 |
| | 16 | 13 | 18 | 11 | 1 | 10 | 14 | -3 | -0 | 8 |
| | 11 | 13 | -5 | 13 | 8 | -2 | 11 | 14 | 21 | 24 |
| | 19 | -13 | 8 | 7 | 6 | 16 | 5 | 10 | 5 | 10 |
| | 14 | 11 | 15 | 11 | 15 | 17 | 22 | 8 | -3 | -2 |
| | 2 | 10 | -8 | 18 | -10 | -9 | -9 | 13 | 7 | 6 |
| | 18 | -8 | 13 | 6 | -10 | -4 | 3 | -5 | 20 | 13 |
| | 26 | -5 | 14 | 22 | 33 | 11 | 24 | 42 | | |
| 80 | 11 | 9 | -7 | 10 | 15 | 20 | 12 | 14 | -3 | 17 |
| | 14 | 16 | 14 | 12 | 3 | 14 | 17 | -0 | 3 | 11 |
| | 11 | 14 | -4 | 12 | 14 | 1 | 15 | 12 | 21 | 20 |
| | 22 | -15 | 10 | 14 | 15 | 20 | 7 | 15 | 9 | 19 |
| | 18 | 9 | 15 | 16 | 19 | 19 | 24 | 8 | -0 | 5 |
| | 4 | 7 | -11 | 23 | -9 | -9 | -15 | 7 | 11 | 7 |
| | 17 | -12 | 14 | 7 | -8 | 1 | 9 | -2 | 24 | 7 |
| | 22 | -12 | 12 | 28 | 27 | 12 | 19 | 42 | 40 | |
| 81 | -0 | -1 | 11 | 3 | -2 | 0 | -5 | -3 | -7 | -2 |
| | 3 | -2 | -0 | -3 | -7 | -2 | -6 | 10 | 2 | -2 |
| | 4 | -3 | 2 | 6 | -1 | -5 | -2 | 3 | 3 | 6 |
| | 5 | 1 | 1 | 1 | -2 | 3 | 4 | 6 | 3 | 7 |
| | 1 | -1 | 2 | -3 | -2 | -1 | -2 | -1 | -3 | -4 |
| | 2 | 1 | 2 | -4 | 5 | 12 | 10 | -0 | 2 | 2 |
| | -1 | 5 | 5 | 4 | -4 | 10 | -3 | 19 | 9 | 13 |
| | 1 | 16 | 9 | 20 | 10 | 17 | 24 | 11 | 13 | 13 |

## Table F5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 82 | 5 | 6 | 6 | 7 | 0 | 5 | 1 | 0 | - 2 | 5 |
| | 11 | - 0 | 4 | 6 | 5 | 4 | 7 | 15 | 10 | 14 |
| | 8 | 3 | 4 | 7 | 1 | 2 | 7 | 8 | 6 | 5 |
| | 8 | 8 | 0 | 9 | 6 | 8 | 6 | 5 | 1 | 0 |
| | 3 | 3 | 5 | 11 | 3 | 7 | 3 | 8 | 9 | 3 |
| | 9 | 11 | 11 | 5 | 8 | 3 | 7 | 8 | 2 | 11 |
| | 5 | 5 | 6 | 5 | 1 | 12 | 7 | 22 | 6 | 18 |
| | 14 | 15 | 18 | 17 | 16 | 13 | 16 | 13 | 17 | 10 |
| | 20 | | | | | | | | | |
| 83 | - 4 | - 3 | 12 | 5 | - 7 | - 5 | - 8 | - 4 | -11 | - 7 |
| | 2 | 1 | - 5 | - 5 | - 2 | - 6 | -10 | 5 | - 2 | 0 |
| | 2 | - 7 | 3 | 2 | 0 | -13 | - 1 | 3 | 2 | 7 |
| | 3 | 7 | - 4 | 2 | -13 | 1 | 1 | 3 | 2 | - 4 |
| | - 2 | 0 | - 4 | - 2 | - 2 | - 4 | - 4 | - 7 | - 1 | 3 |
| | 7 | 4 | 4 | - 5 | 6 | 17 | 13 | - 1 | 2 | 10 |
| | - 0 | 10 | 2 | 4 | 7 | 5 | 2 | 18 | - 8 | 13 |
| | - 2 | 26 | 10 | 8 | 3 | 19 | 18 | 12 | 8 | 1 |
| | 34 | 30 | | | | | | | | |
| 84 | 2 | - 3 | 10 | - 0 | - 5 | -10 | - 3 | - 3 | 3 | - 6 |
| | 2 | - 4 | - 2 | 1 | 5 | 3 | - 5 | 9 | 6 | 3 |
| | - 1 | -11 | 4 | - 2 | - 4 | 4 | - 4 | - 5 | - 1 | 1 |
| | 3 | 9 | - 3 | 2 | - 4 | 1 | 1 | 1 | 4 | - 4 |
| | - 5 | - 4 | - 3 | - 0 | - 1 | 1 | - 1 | 5 | 7 | 2 |
| | 6 | 5 | 7 | - 4 | 4 | 6 | 9 | 2 | - 1 | 10 |
| | - 5 | 10 | 2 | 5 | 6 | 10 | 4 | 25 | - 9 | 9 |
| | 4 | 28 | 15 | 3 | 5 | 20 | 8 | 4 | 11 | 8 |
| | 23 | 33 | 32 | | | | | | | |
| 85 | 8 | 0 | 1 | 4 | 2 | 4 | 3 | 3 | 1 | 6 |
| | 12 | 2 | 2 | 3 | 8 | 4 | 8 | 12 | 14 | 7 |
| | 10 | 1 | - 4 | 8 | 3 | 4 | 11 | 3 | 9 | 5 |
| | 9 | 7 | 1 | 12 | 2 | 6 | 14 | 7 | 9 | 6 |
| | 1 | 7 | 7 | 9 | 5 | 11 | 12 | 8 | 8 | 2 |
| | 6 | 12 | 6 | 10 | 3 | 9 | - 1 | 9 | 4 | 9 |
| | 6 | 7 | 7 | 3 | 1 | 11 | 7 | 12 | 9 | 11 |
| | 10 | 10 | 18 | 16 | 23 | 17 | 17 | 16 | 17 | 16 |
| | 21 | 24 | 20 | 33 | | | | | | |
| 86 | 14 | 9 | -10 | 8 | 9 | 10 | 9 | 14 | 1 | 14 |
| | 10 | 3 | 13 | 7 | 4 | 19 | 29 | 15 | 4 | 14 |
| | 4 | 20 | - 5 | 21 | 18 | 3 | 24 | 4 | 16 | 5 |
| | 18 | - 4 | 8 | 20 | 18 | 20 | 17 | 11 | - 2 | 15 |
| | 22 | - 4 | 15 | 9 | 10 | 7 | 20 | 15 | 6 | 18 |
| | 8 | 18 | - 4 | 14 | 1 | - 5 | - 7 | 11 | 13 | 2 |
| | 14 | - 3 | 6 | - 4 | 5 | 1 | 13 | 13 | 26 | 15 |
| | 15 | - 9 | 8 | 25 | 32 | 7 | 21 | 18 | 18 | 19 |
| | 14 | 22 | 4 | 15 | 24 | | | | | |

## Table F5 Continued

### Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 87 | 5 | 2 | 7 | 2 | -3 | -1 | -1 | -1 | 1 | -1 |
| | 3 | -3 | -2 | 2 | 10 | 3 | 4 | 13 | 10 | 12 |
| | 3 | 1 | 2 | 8 | 1 | 5 | 8 | -5 | -2 | -0 |
| | 4 | 10 | -1 | 7 | 3 | 8 | 7 | -1 | -6 | -3 |
| | -3 | -3 | 3 | 2 | 0 | 0 | 4 | -9 | 12 | 4 |
| | 6 | 13 | 14 | -7 | 6 | 9 | 8 | 10 | 9 | 7 |
| | -1 | 9 | 3 | 2 | 7 | 12 | 9 | 20 | 5 | 9 |
| | 10 | 19 | 11 | 10 | 15 | 14 | 18 | 4 | 9 | -1 |
| | 17 | 35 | 23 | 33 | 26 | 24 | | | | |
| 88 | 6 | 4 | -1 | 10 | 9 | 14 | 9 | 7 | -1 | 9 |
| | 11 | 14 | 9 | 8 | -3 | 8 | 11 | -2 | 0 | 8 |
| | 14 | 13 | 3 | 6 | 12 | -2 | 14 | 13 | 17 | 15 |
| | 18 | -2 | 9 | 9 | 13 | 14 | 8 | 14 | 10 | 14 |
| | 10 | 4 | 9 | 7 | 11 | 13 | 18 | 9 | -2 | 6 |
| | 6 | 8 | -5 | 15 | -4 | -4 | -8 | 4 | 8 | 5 |
| | 11 | -1 | 10 | 3 | -4 | 6 | 10 | -1 | 11 | 4 |
| | 13 | -3 | 14 | 18 | 19 | 7 | 15 | 25 | 26 | 26 |
| | 14 | 25 | 13 | 21 | 23 | 26 | 21 | | | |
| 89 | -5 | -6 | 10 | -4 | -11 | -11 | -10 | -9 | -6 | -9 |
| | -5 | -4 | -11 | -6 | 1 | -6 | -10 | 8 | -1 | 1 |
| | -6 | -14 | -0 | 1 | -10 | -4 | -4 | -7 | -4 | -1 |
| | -3 | 10 | -7 | -2 | -14 | -5 | -4 | -4 | -8 | -13 |
| | -8 | -7 | -6 | -9 | -7 | -2 | -12 | -5 | 3 | 1 |
| | -0 | -3 | 4 | -10 | 15 | 20 | 24 | 5 | -4 | -1 |
| | -4 | 16 | -3 | 4 | 9 | 3 | 1 | 20 | -9 | 1 |
| | -6 | 29 | 3 | 2 | 5 | 15 | 12 | 3 | 3 | -4 |
| | 24 | 21 | 28 | 37 | 22 | 8 | 27 | 14 | | |
| 90 | -1 | -1 | 9 | -0 | -10 | -6 | -4 | -2 | 2 | -2 |
| | 2 | -3 | -3 | 1 | 8 | 3 | 2 | 3 | 2 | 6 |
| | -1 | -2 | 3 | -2 | -2 | 5 | 2 | -3 | -0 | 1 |
| | 2 | 7 | -1 | 4 | -1 | -2 | 1 | 4 | -9 | -2 |
| | -3 | -3 | 3 | -0 | -2 | 3 | 1 | 4 | 10 | -1 |
| | 2 | 4 | 5 | -2 | 10 | 6 | 9 | 1 | -4 | 5 |
| | -2 | 8 | 0 | -2 | 12 | 11 | 12 | 13 | 0 | 1 |
| | 8 | 21 | 12 | 6 | 13 | 10 | 12 | 5 | 12 | 7 |
| | 16 | 22 | 22 | 28 | 24 | 22 | 25 | 25 | 35 | |
| 91 | 13 | 10 | -4 | 12 | 15 | 18 | 11 | 11 | -5 | 16 |
| | 16 | 15 | 14 | 14 | 1 | 13 | 16 | 6 | 1 | 13 |
| | 12 | 20 | -1 | 13 | 14 | -3 | 20 | 8 | 17 | 14 |
| | 19 | -5 | 10 | 18 | 11 | 19 | 11 | 15 | 0 | 11 |
| | 17 | 1 | 22 | 12 | 12 | 16 | 18 | 12 | 2 | 13 |
| | 4 | 12 | -6 | 15 | -4 | -2 | -10 | 15 | 12 | 8 |
| | 16 | -3 | 13 | 5 | -1 | 4 | 6 | 2 | 26 | 18 |
| | 22 | -2 | 11 | 23 | 32 | 12 | 26 | 31 | 30 | 26 |
| | 19 | 21 | 19 | 12 | 23 | 30 | 19 | 30 | 12 | 19 |

### Table F5 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 92 | 12 | 9 | -7 | 11 | 10 | 13 | 8 | 12 | -7 | 9 |
| | 7 | 14 | 13 | 7 | -4 | 10 | 13 | 12 | 2 | 11 |
| | 9 | 17 | -5 | 21 | 14 | -7 | 21 | 8 | 18 | 17 |
| | 13 | -4 | 4 | 14 | 7 | 23 | 12 | 13 | -2 | 6 |
| | 22 | 2 | 12 | 9 | 16 | 9 | 18 | 2 | -1 | 10 |
| | 4 | 19 | -10 | 10 | 2 | 4 | -3 | 16 | 19 | 10 |
| | 24 | -4 | 11 | 8 | -1 | -10 | 5 | 5 | 29 | 17 |
| | 13 | 1 | -2 | 27 | 23 | 17 | 37 | 27 | 26 | 26 |
| | 20 | 15 | 13 | 11 | 16 | 25 | 16 | 23 | 17 | 19 |
| | 37 | | | | | | | | | |
| 93 | 1 | 6 | 5 | 6 | -2 | 9 | 11 | 4 | 3 | 2 |
| | 9 | 6 | 11 | 12 | 7 | 11 | 3 | -3 | -0 | 6 |
| | 7 | 3 | -1 | 5 | 4 | 0 | 8 | 9 | 13 | 15 |
| | 17 | 0 | -1 | 2 | 2 | 10 | 5 | 7 | 4 | 5 |
| | 4 | 12 | 9 | 7 | 9 | 10 | 12 | 8 | 1 | 6 |
| | 2 | 6 | -1 | 7 | 5 | 4 | 6 | 19 | 7 | 29 |
| | 9 | 3 | 12 | 7 | 1 | 8 | 1 | 6 | 9 | 16 |
| | 12 | 14 | 17 | 20 | 16 | 21 | 21 | 19 | 27 | 23 |
| | 22 | 20 | 25 | 24 | 24 | 19 | 18 | 28 | 28 | 29 |
| | 32 | 28 | | | | | | | | |
| 94 | 15 | 12 | -5 | 10 | 10 | 19 | 17 | 10 | -6 | 13 |
| | 16 | 11 | 18 | 10 | -1 | 11 | 12 | 4 | -4 | 13 |
| | 16 | 17 | -1 | 13 | 9 | -4 | 12 | 12 | 18 | 18 |
| | 20 | -9 | 2 | 8 | 6 | 17 | 19 | 7 | 2 | 13 |
| | 10 | 13 | 17 | 11 | 15 | 19 | 26 | 4 | -2 | 1 |
| | 2 | 13 | -2 | 19 | -3 | -1 | -6 | 18 | 10 | 10 |
| | 19 | -2 | 12 | 13 | -6 | -2 | 4 | 0 | 17 | 14 |
| | 16 | -5 | 13 | 23 | 24 | 15 | 20 | 38 | 42 | 33 |
| | 17 | 21 | 13 | 14 | 22 | 24 | 13 | 28 | 13 | 24 |
| | 34 | 35 | 32 | | | | | | | |
| 95 | -6 | -4 | 10 | -7 | -10 | -11 | -7 | -5 | -2 | -8 |
| | -2 | -10 | -8 | -2 | 3 | -1 | -3 | 8 | 3 | 2 |
| | -5 | -10 | -1 | -1 | -4 | 5 | 0 | -7 | -9 | -7 |
| | -3 | 10 | -6 | -3 | -7 | -5 | -3 | -6 | -4 | -13 |
| | -9 | -5 | -8 | -6 | -8 | -5 | -9 | 3 | 7 | 3 |
| | 5 | 3 | 8 | -11 | 13 | 11 | 15 | 2 | -0 | 6 |
| | -8 | 13 | -5 | 0 | 9 | 9 | 7 | 17 | -7 | 1 |
| | -3 | 28 | 13 | 1 | 7 | 15 | 9 | -6 | 5 | -1 |
| | 20 | 22 | 26 | 33 | 21 | 16 | 29 | 18 | 37 | 39 |
| | 18 | 17 | 26 | 17 | | | | | | |
| 96 | 11 | 4 | -8 | 12 | 12 | 11 | 14 | 10 | -3 | 5 |
| | 9 | 9 | 13 | 8 | 0 | 8 | 16 | 1 | -1 | 10 |
| | 6 | 8 | 2 | 11 | 14 | 2 | 11 | 9 | 15 | 8 |
| | 16 | -5 | 3 | 5 | 7 | 13 | 9 | 14 | 6 | 6 |
| | 17 | 4 | 10 | 4 | 8 | 13 | 19 | 2 | -6 | 5 |
| | 8 | 13 | -8 | 20 | -2 | -9 | -11 | 9 | 12 | 2 |
| | 21 | -2 | 9 | 5 | 1 | -0 | 5 | -0 | 22 | 9 |
| | 12 | -2 | 8 | 20 | 17 | 9 | 22 | 27 | 24 | 31 |
| | 12 | 18 | 9 | 11 | 19 | 24 | 15 | 29 | 15 | 17 |
| | 30 | 34 | 29 | 40 | 16 | | | | | |

## Table F5 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 97 | -6 | -5 | 11 | -2 | -9 | -11 | -6 | -10 | 0 | -9 |
| | -1 | -6 | -6 | -3 | 6 | -1 | -2 | 12 | 4 | 4 |
| | -4 | -12 | 1 | -6 | -8 | 3 | -6 | -6 | -7 | -10 |
| | 0 | 8 | -3 | 0 | -8 | -12 | -1 | -5 | -4 | -5 |
| | -10 | -1 | -2 | -2 | -10 | -3 | -4 | 5 | 11 | 3 |
| | 4 | -1 | 8 | -7 | 13 | 11 | 13 | 8 | -4 | 8 |
| | -5 | 16 | -0 | 4 | 16 | 18 | -1 | 21 | -10 | 6 |
| | -2 | 32 | 18 | -2 | 2 | 15 | 7 | -3 | 0 | -3 |
| | 20 | 26 | 28 | 33 | 24 | 11 | 29 | 15 | 40 | 38 |
| | 18 | 15 | 26 | 18 | 47 | 18 | | | | |
| 98 | -10 | -5 | 14 | -7 | -13 | -13 | -12 | -11 | -7 | -14 |
| | -4 | -6 | -9 | -7 | -1 | -4 | -11 | 1 | -3 | -2 |
| | -5 | -16 | -4 | -3 | -4 | -4 | -4 | -7 | -0 | -1 |
| | -2 | 8 | -5 | -7 | -13 | -9 | -7 | -2 | 2 | -9 |
| | -11 | -3 | -9 | -4 | -4 | -3 | -9 | -3 | 3 | -3 |
| | 0 | -5 | 5 | -11 | 15 | 13 | 16 | 3 | -8 | 10 |
| | -8 | 15 | 2 | 7 | 8 | 5 | -4 | 15 | -16 | 5 |
| | -5 | 37 | 11 | 1 | -3 | 21 | 4 | -2 | 5 | 2 |
| | 23 | 24 | 32 | 35 | 17 | 6 | 21 | 14 | 43 | 38 |
| | 10 | 17 | 32 | 19 | 48 | 14 | 50 | | | |
| 99 | 0 | -7 | 10 | -4 | -5 | -4 | -1 | -1 | 1 | -6 |
| | 2 | 0 | 0 | 1 | 9 | -0 | -0 | 0 | -0 | 2 |
| | -3 | -7 | 4 | -5 | -2 | 12 | -0 | -5 | 2 | 5 |
| | 1 | -1 | -1 | -0 | -3 | 1 | 4 | 1 | 2 | -10 |
| | -6 | 1 | -1 | -4 | 0 | 0 | 4 | 8 | 4 | 5 |
| | 5 | 0 | 6 | -1 | 7 | 1 | 5 | 9 | -6 | 8 |
| | -2 | 10 | 5 | 5 | 4 | 15 | 4 | 3 | -3 | 3 |
| | 11 | 16 | 20 | 4 | 13 | 11 | 0 | 8 | 18 | 11 |
| | 14 | 21 | 17 | 29 | 23 | 11 | 23 | 26 | 26 | 30 |
| | 25 | 13 | 34 | 25 | 38 | 21 | 39 | 44 | | |
| 100 | 1 | 5 | 7 | 4 | -3 | -1 | -2 | -1 | 10 | -3 |
| | 3 | 1 | -5 | 5 | 11 | 3 | 6 | 1 | 2 | 8 |
| | -2 | 2 | -1 | -2 | 6 | 13 | 4 | -4 | 4 | -1 |
| | 6 | 2 | 5 | 3 | 3 | 3 | 5 | 0 | 1 | 2 |
| | 2 | -2 | 3 | 7 | 0 | 6 | 3 | 6 | 9 | 6 |
| | 5 | 7 | 9 | 3 | 5 | 1 | 2 | 14 | -2 | -2 |
| | 1 | 11 | 3 | 7 | 9 | 10 | 9 | 7 | -5 | -0 |
| | 8 | 9 | 20 | 4 | 12 | 8 | 2 | 8 | 11 | 10 |
| | 6 | 20 | 11 | 23 | 22 | 18 | 26 | 24 | 20 | 35 |
| | 20 | 8 | 24 | 24 | 29 | 19 | 36 | 32 | 42 | |

## Table F6

Correlation Matrix by Rows Below
Diagonal for SPS Item Scores
3, 6, 9, ---, 300

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 12 | | | | | | | | | |
| 3 | 24 | 10 | | | | | | | | |
| 4 | 7 | 8 | 9 | | | | | | | |
| 5 | 20 | 6 | 14 | 14 | | | | | | |
| 6 | 11 | 8 | 11 | 13 | 33 | | | | | |
| 7 | 9 | 15 | 15 | 10 | 7 | 3 | | | | |
| 8 | 22 | 12 | 21 | 15 | 21 | 17 | 19 | | | |
| 9 | 28 | 9 | 30 | 10 | 31 | 22 | 11 | 27 | | |
| 10 | - 0 | 2 | - 2 | 7 | - 2 | - 1 | 1 | - 0 | -10 | |
| 11 | 19 | 2 | 28 | 7 | 31 | 25 | 6 | 16 | 40 | - 1 |
| 12 | 17 | 5 | 19 | 19 | 25 | 25 | 13 | 20 | 27 | 2 |
| | 31 | | | | | | | | | |
| 13 | 13 | 2 | 10 | 11 | 27 | 29 | 13 | 20 | 25 | 1 |
| | 32 | 40 | | | | | | | | |
| 14 | 5 | 27 | 5 | 5 | 16 | 7 | 21 | 21 | 14 | - 6 |
| | 6 | 8 | 10 | | | | | | | |
| 15 | 9 | 22 | 11 | 9 | 18 | 17 | 11 | 18 | 20 | - 3 |
| | 13 | 13 | 13 | 28 | | | | | | |
| 16 | 4 | 23 | 6 | 8 | 4 | 10 | 25 | 21 | 6 | 5 |
| | 2 | 13 | 13 | 30 | 22 | | | | | |
| 17 | 5 | 5 | 14 | 9 | 11 | 15 | 7 | 7 | 10 | 10 |
| | 21 | 20 | 16 | - 8 | 5 | 1 | | | | |
| 18 | 18 | 9 | 26 | 15 | 9 | 15 | 6 | 21 | 26 | 1 |
| | 16 | 18 | 16 | 9 | 15 | 8 | 15 | | | |
| 19 | 11 | 27 | 8 | 6 | 15 | 10 | 21 | 18 | 14 | 2 |
| | 7 | 13 | 2 | 38 | 20 | 28 | - 4 | 5 | | |
| 20 | 15 | 21 | 12 | 7 | 8 | 15 | 21 | 21 | 15 | - 2 |
| | 8 | 15 | 12 | 25 | 17 | 33 | 4 | 15 | 23 | |
| 21 | 19 | 10 | 15 | 10 | 41 | 31 | 5 | 16 | 31 | - 0 |
| | 33 | 26 | 27 | 14 | 25 | 4 | 12 | 10 | 16 | 16 |
| 22 | 8 | - 1 | 11 | 9 | 18 | 18 | 6 | 11 | 14 | 1 |
| | 21 | 23 | 22 | - 3 | 12 | - 1 | 16 | 13 | - 1 | 6 |
| | 24 | | | | | | | | | |
| 23 | 10 | 2 | 14 | 9 | 24 | 24 | - 1 | 8 | 28 | - 2 |
| | 29 | 20 | 22 | - 2 | 12 | 2 | 17 | 11 | - 3 | 4 |
| | 33 | 27 | | | | | | | | |
| 24 | 8 | 9 | 12 | 10 | 2 | 2 | 6 | 8 | 8 | 7 |
| | 7 | 9 | 1 | 5 | 1 | 1 | 10 | 22 | 6 | 9 |
| | 2 | 5 | 6 | | | | | | | |
| 25 | - 3 | 3 | - 2 | 8 | - 9 | - 3 | 1 | 3 | -10 | 12 |
| | - 8 | - 4 | 3 | - 5 | - 0 | 6 | 8 | 6 | - 3 | - 1 |
| | -11 | - 3 | - 8 | 6 | | | | | | |

Table F6 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 17 | 6 | 25 | 6 | 16 | 19 | 3 | 16 | 33 | -8 |
| | 34 | 24 | 18 | 13 | 16 | 1 | 11 | 22 | 12 | 17 |
| | 36 | 21 | 26 | 11 | -6 | | | | | |
| 27 | 8 | 4 | 6 | 4 | 11 | 16 | 9 | 17 | 14 | 1 |
| | 15 | 20 | 24 | 7 | 12 | 15 | 18 | 15 | 8 | 16 |
| | 11 | 11 | 10 | 6 | 10 | 10 | | | | |
| 28 | -2 | 14 | -3 | 4 | -10 | -12 | 4 | 1 | -11 | 11 |
| | -15 | -9 | -14 | -0 | -1 | 8 | -2 | 1 | 6 | 1 |
| | -14 | -8 | -14 | 6 | 16 | -14 | -4 | | | |
| 29 | 13 | 4 | 18 | 7 | 26 | 27 | -4 | 13 | 35 | -11 |
| | 33 | 26 | 35 | 4 | 17 | 2 | 16 | 16 | 5 | 7 |
| | 34 | 19 | 34 | 4 | -5 | 41 | 17 | -16 | | |
| 30 | 7 | -9 | 10 | 3 | 1 | 0 | -11 | -1 | -2 | 9 |
| | 7 | 4 | -3 | -18 | -7 | -13 | 18 | 15 | -15 | -9 |
| | 2 | 16 | 8 | 13 | 15 | 6 | 3 | -1 | 7 | |
| 31 | -1 | 21 | -2 | 5 | 3 | 1 | 15 | 10 | 4 | 4 |
| | -2 | 5 | 3 | 22 | 13 | 30 | -2 | 0 | 26 | 22 |
| | -2 | -4 | -2 | 2 | -1 | 6 | 7 | 18 | -2 | -16 |
| 32 | 8 | 30 | 3 | 4 | 4 | 7 | 14 | 20 | 8 | -2 |
| | -5 | 6 | 1 | 25 | 25 | 22 | -2 | 8 | 24 | 24 |
| | 6 | 1 | -4 | 8 | 9 | 10 | 14 | 18 | -1 | -13 |
| | 26 | | | | | | | | | |
| 33 | -4 | -1 | -2 | 3 | -9 | -5 | 0 | -4 | -20 | 15 |
| | -9 | -3 | -5 | -14 | -18 | -1 | 12 | -1 | -9 | -5 |
| | -22 | -6 | -10 | 8 | 15 | -14 | 1 | 22 | -11 | 5 |
| | 7 | -0 | | | | | | | | |
| 34 | 12 | 13 | 14 | 13 | 23 | 20 | 3 | 14 | 31 | -5 |
| | 22 | 20 | 15 | 19 | 18 | 9 | 3 | 9 | 20 | 10 |
| | 33 | 12 | 24 | 6 | -6 | 33 | 12 | -6 | 32 | 0 |
| | 9 | 13 | -16 | | | | | | | |
| 35 | 10 | 16 | 16 | 7 | 21 | 14 | 1 | 16 | 22 | -5 |
| | 18 | 12 | 7 | 16 | 20 | 8 | 7 | 22 | 20 | 18 |
| | 17 | 14 | 18 | 13 | -3 | 17 | 14 | 6 | 22 | 4 |
| | 12 | 24 | -5 | 27 | | | | | | |
| 36 | -6 | 11 | -5 | -2 | -16 | -1 | 5 | 1 | -17 | 13 |
| | -18 | -5 | -8 | 5 | -2 | 13 | -5 | -5 | 10 | 6 |
| | -18 | -9 | -15 | 3 | 12 | -18 | -1 | 30 | -20 | -4 |
| | 10 | 14 | 26 | -5 | 1 | | | | | |
| 37 | 8 | 14 | 12 | 1 | 2 | -2 | -1 | 7 | 8 | 4 |
| | 2 | 2 | 1 | 6 | 10 | 2 | 8 | 11 | 3 | 13 |
| | 5 | 2 | 7 | 10 | 3 | 5 | 9 | 13 | 10 | 7 |
| | 3 | 20 | 2 | 9 | 19 | 6 | | | | |
| 38 | 1 | 12 | -4 | 11 | 9 | 13 | 10 | 7 | -1 | 8 |
| | 3 | 8 | 10 | 8 | 11 | 10 | -1 | -3 | 13 | 6 |
| | 1 | 9 | 1 | -3 | 9 | -0 | 15 | 7 | 5 | -6 |
| | 14 | 15 | 5 | 7 | 7 | 14 | -1 | | | |

## Table F6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 7 | 0 | 3 | 5 | 15 | 17 | 5 | 9 | 16 | 3 |
| | 15 | 12 | 16 | 16 | 16 | 7 | 2 | 8 | 10 | 7 |
| | 18 | 14 | 17 | - 1 | 3 | 18 | 14 | - 8 | 21 | 2 |
| | - 1 | 5 | -10 | 19 | 19 | - 3 | 0 | 6 | | |
| 40 | - 1 | 3 | - 3 | - 0 | -18 | -13 | 5 | 2 | -16 | 17 |
| | -12 | - 5 | - 8 | - 7 | -12 | 8 | 3 | 6 | - 0 | 2 |
| | -24 | - 9 | -23 | 11 | 18 | -17 | - 3 | 26 | -20 | 5 |
| | 21 | 13 | 33 | -12 | - 7 | 30 | 9 | 5 | -16 | |
| 41 | 10 | 12 | 14 | 10 | 18 | 17 | 9 | 20 | 26 | -11 |
| | 22 | 21 | 16 | 19 | 22 | 11 | 3 | 15 | 19 | 18 |
| | 30 | 18 | 21 | 8 | - 6 | 28 | 17 | - 5 | 27 | 3 |
| | 12 | 18 | -22 | 36 | 32 | - 9 | 13 | 6 | 19 | -18 |
| 42 | 18 | 6 | 17 | 7 | 27 | 18 | 2 | 18 | 29 | - 9 |
| | 29 | 24 | 26 | 11 | 11 | 8 | 7 | 21 | 7 | 14 |
| | 31 | 18 | 31 | 9 | - 9 | 33 | 20 | - 7 | 34 | 8 |
| | 5 | 7 | -15 | 23 | 24 | -13 | 11 | - 1 | 12 | -14 |
| | 27 | | | | | | | | | |
| 43 | 11 | 9 | 13 | 17 | 14 | 14 | 9 | 19 | 20 | - 2 |
| | 13 | 16 | 8 | 8 | 16 | 9 | 4 | 14 | 10 | 14 |
| | 8 | 11 | 7 | 14 | 2 | 17 | 16 | 4 | 11 | - 2 |
| | 11 | 17 | - 2 | 13 | 16 | - 2 | 10 | 9 | 14 | 2 |
| | 25 | 9 | | | | | | | | |
| 44 | 6 | - 1 | 9 | 3 | - 4 | 6 | - 3 | 9 | 4 | 0 |
| | 9 | 6 | 2 | - 8 | - 1 | 2 | 7 | 12 | - 3 | 1 |
| | 7 | 9 | 6 | 14 | 10 | 8 | 6 | 1 | 6 | 17 |
| | - 4 | 1 | 3 | 4 | 6 | 3 | 10 | 1 | 4 | 9 |
| | 7 | 10 | 10 | | | | | | | |
| 45 | - 3 | 5 | 1 | - 3 | -10 | - 9 | - 2 | - 0 | -12 | 11 |
| | -14 | -13 | -19 | - 2 | - 3 | 8 | 6 | - 1 | 2 | 5 |
| | -12 | - 8 | -12 | 4 | 14 | -14 | - 7 | 28 | -20 | - 4 |
| | 10 | 13 | 21 | - 8 | 2 | 23 | 10 | 6 | - 6 | 29 |
| | -13 | -11 | 1 | 11 | | | | | | |
| 46 | 0 | -12 | - 2 | - 3 | 10 | 11 | - 3 | - 3 | - 1 | 3 |
| | 11 | 15 | 19 | - 4 | - 0 | - 0 | 12 | 6 | - 1 | - 3 |
| | 1 | 13 | 7 | 5 | 8 | 2 | 23 | -13 | 12 | 13 |
| | - 5 | - 8 | 6 | - 1 | 0 | 2 | - 5 | 16 | 10 | 3 |
| | 3 | 8 | 6 | 9 | - 2 | | | | | |
| 47 | 8 | 22 | 16 | 9 | 10 | 15 | 9 | 19 | 19 | - 7 |
| | 16 | 13 | 7 | 24 | 27 | [illegible] | 11 | 9 | 20 | 18 |
| | 21 | 12 | 13 | 7 | - 2 | 26 | 13 | 0 | 21 | - 2 |
| | 16 | 26 | -15 | 28 | 24 | -10 | 16 | 5 | 11 | -15 |
| | 32 | 20 | 22 | 2 | 3 | - 3 | | | | |
| 48 | - 2 | 15 | - 1 | 7 | 4 | 6 | 10 | 9 | 2 | 7 |
| | - 1 | 9 | 6 | 17 | 9 | 18 | 1 | 1 | 23 | 18 |
| | 3 | - 1 | 1 | 5 | 7 | 6 | 10 | 7 | 4 | - 9 |
| | 18 | 22 | - 0 | 7 | 16 | 14 | 6 | 22 | 7 | 10 |
| | 13 | 3 | 9 | 5 | 12 | 6 | 18 | | | |

## Table F6 Continued

### Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 49 | 10 | 22 | 15 | 11 | 15 | 15 | 8 | 21 | 22 | - 8 |
| | 10 | 14 | 10 | 22 | 23 | 16 | 6 | 11 | 23 | 19 |
| | 18 | 7 | 10 | 10 | - 4 | 19 | 10 | - 1 | 19 | - 1 |
| | 16 | 25 | - 8 | 19 | 27 | 2 | 15 | 9 | 10 | - 5 |
| | 31 | 18 | 15 | 5 | - 1 | - 0 | 28 | 14 | | |
| 50 | 8 | - 1 | 13 | 6 | 16 | 11 | 7 | 17 | 20 | - 3 |
| | 20 | 17 | 18 | 10 | 12 | 13 | 12 | 15 | 9 | 24 |
| | 22 | 19 | 22 | 9 | - 4 | 20 | 13 | -13 | 28 | 0 |
| | 11 | 6 | -10 | 25 | 13 | - 7 | 10 | - 3 | 13 | - 3 |
| | 20 | 28 | 10 | 7 | - 5 | 11 | 14 | 6 | 16 | |
| 51 | 7 | 15 | 11 | 8 | 7 | 17 | 7 | 17 | 12 | - 2 |
| | 8 | 13 | 7 | 13 | 14 | 12 | 7 | 10 | 14 | 20 |
| | 15 | 8 | 6 | 7 | 5 | 9 | 22 | 7 | 12 | 1 |
| | 14 | 21 | - 2 | 13 | 25 | 11 | 11 | 14 | 12 | 4 |
| | 17 | 14 | 21 | 17 | 9 | 7 | 19 | 21 | 14 | 17 |
| 52 | 6 | 9 | 10 | 8 | 8 | 9 | 3 | 14 | 15 | - 8 |
| | 14 | 12 | 7 | 7 | 16 | 9 | 9 | 12 | 14 | 18 |
| | 16 | 8 | 14 | 13 | 3 | 14 | 7 | - 2 | 22 | 8 |
| | 1 | 13 | - 6 | 16 | 18 | - 1 | 17 | - 2 | 1 | - 1 |
| | 20 | 17 | 14 | 20 | 2 | 3 | 21 | 10 | 19 | 19 |
| | 16 | | | | | | | | | |
| 53 | 2 | - 1 | - 3 | - 8 | - 8 | - 9 | 2 | 4 | - 3 | 5 |
| | 2 | - 8 | 1 | - 5 | 3 | 5 | 1 | - 7 | 0 | 1 |
| | 2 | - 5 | - 0 | - 2 | 0 | 3 | 4 | 4 | - 7 | - 3 |
| | 2 | 2 | 2 | -11 | - 9 | 2 | 4 | - 4 | - 1 | 0 |
| | -10 | 3 | - 9 | 1 | 6 | 2 | - 1 | 4 | - 3 | 4 |
| | - 2 | - 3 | | | | | | | | |
| 54 | 2 | - 4 | 2 | 2 | 6 | - 4 | 5 | 2 | - 4 | 15 |
| | 1 | 9 | 2 | - 9 | - 6 | 1 | 14 | 6 | - 0 | - 2 |
| | - 9 | 4 | - 5 | 15 | 16 | - 4 | 8 | 11 | - 3 | 13 |
| | 2 | 1 | 29 | -16 | - 2 | 17 | - 2 | 9 | - 3 | 24 |
| | -10 | - 2 | 6 | 14 | 13 | 21 | - 6 | 10 | - 1 | 5 |
| | 10 | 3 | 3 | | | | | | | |
| 55 | 7 | 9 | 1 | 10 | 20 | 22 | 4 | 11 | 20 | - 2 |
| | 20 | 20 | 13 | 16 | 17 | 10 | 6 | 2 | 14 | 8 |
| | 27 | 13 | 17 | 0 | - 1 | 19 | 11 | -13 | 27 | - 0 |
| | 3 | 10 | -15 | 22 | 14 | - 7 | 2 | 15 | 25 | -17 |
| | 27 | 19 | 21 | 2 | -11 | 10 | 25 | 11 | 19 | 12 |
| | 17 | 18 | - 1 | - 0 | | | | | | |
| 56 | 8 | 11 | 5 | 6 | 15 | 19 | 11 | 14 | 13 | - 1 |
| | 14 | 17 | 21 | 14 | 13 | 16 | 7 | 2 | 15 | 19 |
| | 20 | 14 | 15 | - 0 | 1 | 17 | 17 | - 3 | 12 | - 3 |
| | 17 | 18 | -13 | 22 | 15 | 2 | - 0 | 17 | 16 | - 4 |
| | 22 | 17 | 21 | 7 | - 3 | 11 | 29 | 18 | 20 | 16 |
| | 25 | 13 | 3 | - 4 | 29 | | | | | |

## Table F6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57 | 7 | 3 | 3 | - 3 | - 2 | 0 | 2 | 0 | - 7 | 17 |
| | -10 | - 0 | - 7 | - 7 | - 5 | 0 | 1 | 2 | - 2 | 1 |
| | - 5 | - 0 | - 3 | 3 | 16 | -12 | - 0 | 26 | -12 | 7 |
| | 8 | 10 | 19 | -12 | 1 | 24 | 9 | 10 | - 6 | 32 |
| | -15 | - 2 | - 1 | 10 | 27 | 8 | - 3 | 6 | 1 | - 4 |
| | 9 | - 3 | 3 | 23 | - 8 | - 2 | | | | |
| 58 | 13 | 9 | 17 | 14 | 20 | 16 | 2 | 18 | 22 | - 8 |
| | 22 | 18 | 8 | 11 | 18 | 4 | 15 | 12 | 15 | 9 |
| | 24 | 17 | 16 | 10 | - 2 | 25 | 10 | - 9 | 24 | 2 |
| | 5 | 9 | -15 | 29 | 27 | - 9 | 12 | 3 | 11 | -11 |
| | 29 | 20 | 18 | 7 | - 6 | 7 | 31 | 10 | 24 | 18 |
| | 14 | 23 | - 4 | - 0 | 26 | 26 | - 9 | | | |
| 59 | 9 | 10 | 11 | 1 | 0 | 4 | 8 | 11 | 5 | 2 |
| | 2 | 14 | 8 | 10 | 5 | 12 | 2 | 13 | 12 | 19 |
| | 3 | 4 | 3 | 7 | - 0 | 5 | 11 | 9 | - 1 | - 1 |
| | 9 | 19 | 5 | 1 | 9 | 16 | 7 | 6 | - 2 | 21 |
| | 5 | 11 | 14 | 15 | 14 | 13 | 6 | 10 | 9 | 14 |
| | 23 | 14 | 3 | 17 | 6 | 14 | 12 | 10 | | |
| 60 | 13 | 10 | 13 | 10 | 18 | 15 | 4 | 14 | 22 | - 6 |
| | 14 | 25 | 17 | 15 | 14 | 11 | 6 | 14 | 17 | 15 |
| | 21 | 16 | 16 | 8 | - 2 | 21 | 19 | - 7 | 23 | - 5 |
| | 12 | 10 | -11 | 19 | 22 | - 1 | 11 | 6 | 11 | - 8 |
| | 17 | 26 | 18 | 14 | - 5 | 14 | 13 | 13 | 15 | 24 |
| | 23 | 20 | - 9 | 10 | 24 | 21 | - 0 | 21 | 17 | |
| 61 | 10 | - 3 | 8 | 6 | 16 | 17 | - 3 | 9 | 20 | 0 |
| | 20 | 20 | 22 | 4 | 10 | - 3 | 7 | 14 | 3 | 4 |
| | 22 | 19 | 19 | 9 | 3 | 20 | 11 | - 8 | 27 | 11 |
| | 1 | 2 | -13 | 14 | 20 | -13 | 2 | 5 | 19 | -10 |
| | 22 | 22 | 28 | 14 | -11 | 19 | 17 | 7 | 14 | 20 |
| | 16 | 19 | - 3 | 8 | 22 | 24 | 2 | 26 | 10 | 25 |
| 62 | 6 | - 2 | 13 | 4 | 6 | 8 | 4 | 10 | 11 | - 7 |
| | 11 | 15 | 10 | 0 | 8 | 1 | 15 | 3 | 3 | 4 |
| | 16 | 13 | 11 | 14 | - 1 | 18 | 10 | - 5 | 19 | 9 |
| | - 1 | 7 | - 5 | 12 | 12 | - 3 | 11 | - 1 | 9 | - 7 |
| | 12 | 17 | 9 | 27 | 1 | 11 | 18 | 7 | 14 | 16 |
| | 16 | 22 | 3 | 8 | 13 | 15 | 9 | 23 | 14 | 19 |
| | 19 | | | | | | | | | |
| 63 | 12 | 2 | 6 | 8 | 18 | 19 | 7 | 13 | 17 | 2 |
| | 15 | 17 | 22 | 11 | 11 | 5 | 9 | 8 | 9 | 9 |
| | 21 | 21 | 17 | 3 | 3 | 22 | 22 | - 5 | 23 | 2 |
| | 12 | 5 | - 8 | 15 | 12 | - 6 | - 0 | 17 | 20 | - 8 |
| | 23 | 24 | 19 | 7 | -12 | 22 | 19 | 13 | 17 | 15 |
| | 15 | 12 | 3 | 11 | 30 | 21 | 2 | 24 | 12 | 26 |
| | 32 | 23 | | | | | | | | |

Table F6 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 64 | 10 | 17 | 4 | 4 | 7 | 5 | 14 | 8 | 15 | - 5 |
| | 6 | 7 | 5 | 24 | 18 | 18 | - 8 | 3 | 23 | 15 |
| | 13 | - 3 | 6 | 6 | 0 | 16 | 5 | 7 | 8 | - 8 |
| | 16 | 18 | - 9 | 11 | 16 | 6 | 6 | 8 | 8 | 2 |
| | 14 | 6 | 15 | 1 | 8 | - 2 | 23 | 15 | 17 | 4 |
| | 21 | 12 | - 2 | 4 | 16 | 20 | 4 | 20 | 12 | 21 |
| | 12 | 9 | 14 | | | | | | | |
| 65 | 11 | 14 | 14 | 10 | 19 | 18 | 7 | 13 | 16 | -10 |
| | 17 | 22 | 18 | 17 | 19 | 9 | 8 | 10 | 19 | 18 |
| | 32 | 19 | 24 | 1 | - 6 | 29 | 11 | - 6 | 25 | - 3 |
| | 5 | 10 | -13 | 28 | 29 | - 7 | 11 | 10 | 23 | -18 |
| | 32 | 27 | 14 | 11 | - 6 | 7 | 30 | 12 | 26 | 18 |
| | 21 | 20 | - 1 | - 1 | 29 | 28 | - 1 | 31 | 12 | 27 |
| | 20 | 25 | 27 | 22 | | | | | | |
| 66 | 8 | 11 | 10 | 8 | 15 | 20 | - 2 | 7 | 19 | -11 |
| | 14 | 15 | 10 | 12 | 16 | 6 | 5 | 10 | 11 | 6 |
| | 26 | 14 | 18 | 1 | - 6 | 23 | 6 | - 8 | 25 | 7 |
| | 5 | 8 | -20 | 28 | 19 | - 9 | 11 | 2 | 16 | -18 |
| | 21 | 21 | 13 | 7 | - 8 | - 3 | 26 | 7 | 20 | 16 |
| | 7 | 15 | - 6 | -14 | 21 | 16 | - 9 | 29 | 0 | 16 |
| | 18 | 20 | 14 | 12 | 26 | | | | | |
| 67 | -12 | 7 | - 6 | - 0 | - 5 | - 3 | - 1 | - 7 | -15 | 15 |
| | -11 | - 0 | 1 | 4 | 2 | 5 | 2 | - 4 | 2 | 6 |
| | - 9 | 0 | -14 | - 3 | 13 | -10 | 2 | 17 | -12 | - 3 |
| | 10 | 8 | 10 | - 9 | - 2 | 15 | 1 | 4 | - 2 | 14 |
| | -14 | -10 | - 3 | - 3 | 17 | 8 | - 0 | 5 | - 6 | - 5 |
| | 6 | - 8 | 1 | 8 | - 5 | - 2 | 17 | -10 | 3 | 3 |
| | -11 | - 5 | - 2 | 5 | - 3 | -12 | | | | |
| 68 | 7 | 4 | 6 | 7 | - 6 | - 4 | - 0 | - 0 | - 1 | 8 |
| | - 1 | 2 | -12 | 0 | - 4 | 1 | 5 | 6 | 2 | 9 |
| | - 3 | - 5 | - 3 | 11 | 9 | 7 | 1 | 13 | - 4 | 6 |
| | 1 | 9 | 15 | - 2 | 5 | 8 | 9 | - 1 | - 2 | 11 |
| | - 7 | 4 | 9 | 2 | 10 | - 5 | 4 | - 1 | 2 | - 2 |
| | 7 | 6 | - 3 | 11 | - 2 | - 2 | 17 | - 1 | 7 | 2 |
| | - 2 | 2 | - 2 | 6 | 2 | - 6 | 14 | | | |
| 69 | 1 | 5 | - 2 | 2 | 4 | 4 | 1 | 6 | 4 | 4 |
| | 2 | 4 | 5 | 6 | 6 | 11 | 1 | 8 | 11 | 18 |
| | 3 | 9 | - 5 | 5 | 5 | - 0 | 10 | 7 | 7 | 1 |
| | 12 | 5 | 2 | 3 | 8 | 7 | - 0 | 6 | 4 | 3 |
| | 2 | 1 | 12 | 1 | 6 | 7 | 1 | 5 | 6 | 6 |
| | 9 | 8 | - 1 | 5 | 1 | 10 | 6 | 6 | 9 | 8 |
| | 6 | 2 | 7 | 6 | 3 | 8 | 17 | 16 | | |

## Table F6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 | 3 | - 3 | 5 | 3 | - 5 | - 0 | - 5 | - 4 | - 3 | 6 |
| | - 0 | - 2 | - 3 | -15 | - 7 | - 5 | 8 | 3 | -10 | - 3 |
| | - 8 | 2 | - 1 | 10 | 10 | - 9 | 1 | 11 | - 4 | 18 |
| | - 8 | - 5 | 15 | -13 | - 5 | 8 | 0 | - 2 | - 6 | 17 |
| | -10 | - 2 | 1 | 7 | 9 | 11 | -13 | - 3 | - 4 | - 4 |
| | 0 | 0 | 6 | 18 | - 8 | - 6 | 16 | - 4 | 8 | - 7 |
| | - 3 | 7 | - 0 | - 6 | - 7 | - 9 | 13 | 31 | 17 | |
| 71 | 6 | 6 | 8 | 4 | 10 | 16 | 4 | 3 | 21 | - 8 |
| | 18 | 15 | 17 | 6 | 9 | 10 | 7 | 3 | 6 | 10 |
| | 17 | 12 | 16 | - 0 | - 3 | 13 | 16 | - 5 | 23 | 1 |
| | 2 | 5 | - 4 | 16 | 15 | - 2 | - 3 | 8 | 14 | -10 |
| | 15 | 11 | 13 | 7 | -11 | 4 | 8 | 6 | 12 | 7 |
| | 8 | 9 | - 8 | - 3 | 16 | 16 | 1 | 16 | 1 | 12 |
| | 20 | 13 | 20 | 8 | 22 | 26 | - 5 | 6 | 8 | - 3 |
| 72 | 5 | - 2 | - 3 | 2 | 14 | 17 | - 8 | - 3 | 7 | 1 |
| | 10 | 10 | 8 | 2 | 2 | - 3 | 11 | - 2 | - 2 | 1 |
| | 9 | 2 | 10 | - 3 | 4 | 7 | 8 | - 3 | 13 | 3 |
| | 0 | 2 | - 4 | 7 | 3 | - 4 | - 2 | 7 | 6 | -11 |
| | 6 | 9 | 13 | 3 | - 3 | 14 | 3 | 1 | 1 | 4 |
| | 2 | 4 | 0 | - 7 | 13 | 12 | - 4 | 8 | 2 | 11 |
| | 18 | 8 | 12 | 6 | 9 | 13 | 5 | 4 | 7 | 5 |
| | 17 | | | | | | | | | |
| 73 | - 1 | 8 | 2 | 1 | - 3 | - 8 | 5 | - 4 | - 7 | 12 |
| | -10 | - 3 | - 6 | 4 | - 3 | 8 | 2 | 5 | 4 | 3 |
| | -18 | - 6 | -12 | 10 | 17 | - 4 | - 2 | 20 | -15 | - 1 |
| | 10 | 10 | 20 | -11 | - 0 | 21 | 6 | - 4 | - 9 | 23 |
| | -12 | - 2 | - 4 | 2 | 18 | 3 | - 5 | 5 | - 1 | - 5 |
| | 3 | - 6 | - 0 | 19 | - 9 | - 6 | 24 | - 7 | 13 | - 0 |
| | 0 | - 2 | - 4 | 6 | -11 | -11 | 27 | 24 | 16 | 30 |
| | - 4 | 3 | | | | | | | | |
| 74 | 6 | - 3 | 14 | 6 | 3 | 3 | 1 | 8 | 6 | 0 |
| | 11 | 3 | 1 | - 8 | - 6 | - 4 | 8 | 12 | - 0 | - 5 |
| | 1 | 4 | - 0 | 13 | 4 | 8 | 6 | 2 | 10 | 16 |
| | -10 | - 4 | 8 | - 4 | 5 | - 0 | 4 | - 1 | - 1 | 7 |
| | 4 | 13 | 4 | 14 | - 1 | 5 | - 6 | - 4 | 4 | - 1 |
| | 3 | 5 | 1 | 14 | 2 | 1 | 1 | 3 | 9 | 1 |
| | 4 | 12 | 5 | - 3 | 1 | 6 | - 5 | 18 | 8 | 34 |
| | 4 | 10 | 16 | | | | | | | |
| 75 | 15 | 8 | 15 | 6 | 22 | 15 | 7 | 23 | 30 | -16 |
| | 21 | 17 | 19 | 13 | 14 | 11 | 5 | 17 | 16 | 16 |
| | 21 | 12 | 17 | 3 | - 7 | 23 | 14 | - 9 | 26 | 3 |
| | 8 | 7 | -18 | 22 | 24 | -12 | 1 | 2 | 21 | -15 |
| | 29 | 22 | 18 | 7 | -12 | 5 | 20 | 8 | 18 | 22 |
| | 11 | 15 | - 0 | - 8 | 17 | 23 | -11 | 23 | 6 | 19 |
| | 18 | 14 | 15 | 7 | 23 | 33 | -11 | - 4 | 10 | - 6 |
| | 23 | 15 | - 9 | 13 | | | | | | |

## Table F6 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 76 | 4 | 4 | - 1 | 8 | - 1 | 1 | 7 | 6 | 6 | - 4 |
| | 8 | 10 | 7 | 10 | 4 | 11 | 7 | 8 | 4 | 11 |
| | 3 | 4 | 2 | 2 | 5 | 10 | 4 | 4 | 6 | 3 |
| | 7 | 5 | - 2 | 4 | 5 | - 3 | 2 | 1 | 7 | - 1 |
| | 12 | 13 | 9 | 4 | 0 | 4 | 11 | 4 | 4 | 4 |
| | 5 | 8 | 4 | 2 | 6 | 3 | 0 | 3 | 11 | 6 |
| | 8 | 4 | 9 | 6 | 7 | 7 | 4 | 10 | 10 | 6 |
| | 12 | 17 | 9 | 13 | 15 | | | | | |
| 77 | 9 | - 1 | 4 | 2 | 10 | 9 | 1 | 6 | 15 | 4 |
| | 14 | 12 | 18 | 1 | 4 | - 4 | 5 | 7 | 1 | 3 |
| | 14 | 14 | 10 | 0 | - 1 | 7 | 7 | - 3 | 17 | 4 |
| | - 2 | 1 | - 4 | 6 | 5 | - 7 | 4 | 3 | 9 | - 5 |
| | 10 | 17 | 14 | 6 | - 9 | 6 | 6 | 0 | 0 | 8 |
| | 10 | 7 | 1 | - 1 | 4 | 2 | - 4 | 5 | - 2 | 11 |
| | 28 | 7 | 10 | 4 | 7 | 17 | 1 | 1 | 8 | 13 |
| | 15 | 16 | 6 | 12 | 25 | 25 | | | | |
| 78 | 1 | - 1 | 2 | 7 | 18 | 16 | 2 | 7 | 13 | - 5 |
| | 12 | 17 | 24 | 1 | 2 | 5 | 10 | 5 | 2 | 7 |
| | 16 | 14 | 18 | 1 | 4 | 14 | 12 | - 6 | 26 | 3 |
| | - 3 | - 4 | - 8 | 13 | 8 | - 8 | 1 | 4 | 11 | -10 |
| | 13 | 19 | 9 | 3 | -10 | 9 | 5 | 6 | 6 | 12 |
| | 12 | 9 | - 9 | 0 | 15 | 10 | -10 | 11 | 5 | 16 |
| | 20 | 12 | 15 | 5 | 17 | 18 | - 1 | - 3 | 4 | 3 |
| | 22 | 19 | 4 | 12 | 29 | 20 | 34 | | | |
| 79 | - 1 | - 4 | 6 | 1 | 6 | 7 | 5 | 4 | 11 | - 7 |
| | 9 | 16 | 30 | 5 | 0 | 2 | 7 | 8 | 2 | 4 |
| | 9 | 13 | 12 | - 1 | - 3 | 11 | 14 | -11 | 16 | 5 |
| | - 0 | - 6 | - 8 | 3 | 4 | - 5 | - 2 | 1 | 12 | -11 |
| | 6 | 15 | 3 | 1 | -13 | 14 | - 1 | 3 | 2 | 12 |
| | 6 | 3 | - 4 | 3 | 2 | 8 | - 1 | - 2 | 4 | 12 |
| | 17 | 7 | 11 | 1 | 7 | 4 | 7 | - 6 | 5 | 8 |
| | 15 | 15 | 6 | 8 | 25 | 24 | 34 | 38 | | |
| 80 | 11 | 4 | 8 | 3 | 12 | 11 | 3 | 10 | 18 | - 5 |
| | 17 | 15 | 20 | 9 | 7 | 5 | 4 | 7 | 10 | 9 |
| | 23 | 7 | 18 | - 4 | - 7 | 22 | 15 | - 7 | 25 | - 4 |
| | 5 | - 2 | -15 | 15 | 8 | -15 | 2 | 6 | 12 | -16 |
| | 21 | 19 | 5 | - 0 | - 9 | 5 | 12 | 5 | 16 | 11 |
| | - 1 | 8 | 2 | -10 | 14 | 12 | -11 | 15 | 2 | 13 |
| | 23 | 12 | 25 | 8 | 18 | 23 | - 8 | 1 | 1 | - 6 |
| | 24 | 21 | - 9 | 6 | 33 | 19 | 24 | 31 | 26 | |
| 81 | 9 | 5 | - 3 | - 3 | 8 | 3 | 4 | 3 | 14 | -10 |
| | 6 | 4 | 10 | 17 | 12 | 11 | 0 | 1 | 13 | 14 |
| | 11 | 5 | 4 | - 3 | - 4 | 7 | 6 | - 7 | 18 | - 2 |
| | 11 | 2 | -13 | 14 | 7 | - 4 | 4 | - 3 | 10 | -14 |
| | 15 | 8 | 6 | - 1 | - 4 | 3 | 16 | 3 | 13 | 15 |
| | - 2 | 10 | - 6 | -11 | 9 | 9 | -12 | 13 | 2 | 13 |
| | 9 | 12 | 10 | 10 | 11 | 24 | - 2 | - 9 | 8 | - 8 |
| | 16 | 17 | - 4 | - 6 | 24 | 20 | 17 | 19 | 20 | 28 |

## Table F6 Continued

### Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 82 | 7 | 6 | 8 | 4 | 18 | 16 | -5 | 9 | 17 | -6 |
| | 16 | 11 | 16 | 10 | 11 | 2 | 4 | 9 | 11 | 7 |
| | 25 | 11 | 22 | -2 | -11 | 18 | 12 | -7 | 29 | 1 |
| | 1 | 3 | -21 | 24 | 16 | -12 | 5 | -1 | 17 | -20 |
| | 22 | 23 | 10 | 2 | -9 | 2 | 19 | -1 | 16 | 15 |
| | 5 | 11 | -8 | -14 | 16 | 13 | -8 | 20 | 6 | 19 |
| | 12 | 9 | 15 | 12 | 26 | 32 | -7 | -4 | 2 | -9 |
| | 16 | 17 | -14 | 2 | 38 | 12 | 20 | 31 | 22 | 35 |
| | 31 | | | | | | | | | |
| 83 | 2 | -1 | -3 | -8 | -8 | -9 | 2 | 4 | -3 | 5 |
| | 2 | -8 | 1 | -4 | 3 | 5 | 1 | -7 | 0 | 1 |
| | 2 | -5 | -0 | -2 | 0 | 3 | 4 | 4 | -7 | -3 |
| | 2 | 2 | 2 | -11 | -9 | 2 | 4 | -4 | -1 | 0 |
| | -10 | 3 | -9 | 1 | 6 | 2 | -1 | 4 | -3 | 4 |
| | -2 | -3 | 100 | 3 | -1 | 3 | 3 | -4 | 3 | -9 |
| | -3 | 3 | 3 | -2 | -1 | -6 | 1 | -3 | -1 | 6 |
| | -8 | 0 | -0 | 1 | -0 | 4 | 1 | -9 | -4 | 2 |
| | -6 | -8 | | | | | | | | |
| 84 | 16 | -1 | 15 | 2 | 5 | 0 | -2 | 17 | 18 | -8 |
| | 11 | 8 | 3 | 1 | -0 | -3 | 9 | 20 | 3 | 5 |
| | 10 | 5 | 11 | 11 | 0 | 15 | 7 | 0 | 14 | 7 |
| | -6 | -3 | -2 | 7 | 13 | -7 | 11 | -8 | 4 | 3 |
| | 12 | 23 | 7 | 5 | -3 | -5 | 10 | -4 | 11 | 7 |
| | 9 | 10 | 3 | 0 | 2 | 5 | 3 | 12 | 7 | 11 |
| | 6 | 10 | 9 | 4 | 12 | 17 | -12 | 18 | 5 | 14 |
| | 7 | 14 | 4 | 34 | 26 | 19 | 19 | 19 | 16 | 21 |
| | 10 | 23 | 3 | | | | | | | |
| 85 | 9 | 6 | 8 | 6 | 6 | 7 | 1 | 16 | 14 | -6 |
| | 9 | 8 | 9 | 8 | 1 | 5 | 7 | 10 | 11 | 11 |
| | 13 | 3 | 12 | 10 | 5 | 17 | 13 | 0 | 18 | 1 |
| | 2 | 9 | -9 | 11 | 14 | -8 | 8 | 3 | 10 | -4 |
| | 17 | 21 | 8 | 8 | -8 | 0 | 13 | 7 | 16 | 11 |
| | 20 | 16 | -5 | -3 | 12 | 9 | -9 | 11 | 11 | 21 |
| | 11 | 11 | 16 | 12 | 18 | 15 | -2 | 7 | 7 | -0 |
| | 13 | 15 | 4 | 15 | 29 | 16 | 23 | 25 | 20 | 26 |
| | 22 | 29 | -5 | 33 | | | | | | |
| 86 | 6 | 5 | 11 | 6 | 8 | 8 | 3 | 15 | 21 | -9 |
| | 16 | 7 | 12 | 5 | 4 | 4 | 9 | 10 | 9 | 9 |
| | 14 | 4 | 14 | 5 | 2 | 16 | 14 | -4 | 21 | 6 |
| | -0 | 6 | -12 | 13 | 13 | -5 | 6 | 1 | 7 | -11 |
| | 21 | 17 | 10 | 6 | -8 | 4 | 9 | 7 | 14 | 7 |
| | 16 | 13 | 0 | -4 | 11 | 9 | -6 | 14 | 1 | 15 |
| | 9 | 11 | 13 | 10 | 15 | 16 | -8 | 1 | 5 | -0 |
| | 17 | 19 | -1 | 12 | 28 | 20 | 22 | 26 | 22 | 32 |
| | 19 | 30 | 0 | 34 | 41 | | | | | |

Table F6 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 87 | 9 | 7 | 2 | 10 | 16 | 15 | 1 | 11 | 14 | - 2 |
| | 17 | 8 | 13 | 12 | 10 | 4 | 8 | 6 | 10 | 7 |
| | 20 | 11 | 15 | 2 | 0 | 17 | 15 | - 7 | 28 | - 0 |
| | - 2 | 3 | -13 | 19 | 11 | -14 | 3 | 12 | 19 | -18 |
| | 14 | 21 | 9 | 5 | - 9 | 4 | 15 | 6 | 14 | 10 |
| | 9 | 12 | 2 | -11 | 21 | 14 | - 9 | 21 | - 1 | 17 |
| | 15 | 11 | 21 | 11 | 19 | 25 | - 4 | - 9 | 3 | - 8 |
| | 22 | 21 | - 8 | 2 | 28 | 13 | 18 | 29 | 19 | 31 |
| | 27 | 41 | 2 | 17 | 32 | 32 | | | | |
| 88 | - 4 | 2 | - 4 | 5 | 2 | 8 | - 0 | - 2 | - 2 | 0 |
| | - 3 | 1 | 9 | 4 | 10 | 5 | 5 | 9 | 3 | 6 |
| | 2 | 6 | 5 | - 2 | 4 | 2 | 2 | 5 | 6 | - 0 |
| | 6 | 3 | 2 | 6 | 3 | 2 | 3 | 10 | 2 | 3 |
| | 2 | 0 | 5 | - 2 | 7 | 11 | 2 | 3 | 5 | 4 |
| | 13 | 0 | - 1 | - 1 | - 0 | 3 | 6 | 2 | 6 | 6 |
| | 7 | 5 | 4 | 1 | - 1 | 5 | 17 | - 1 | 13 | 3 |
| | 6 | 17 | 12 | 0 | 7 | 15 | 18 | 16 | 23 | 18 |
| | 16 | 13 | - 1 | 4 | 12 | 15 | 23 | | | |
| 89 | - 3 | - 1 | - 1 | 10 | 7 | 10 | 2 | 4 | 11 | 0 |
| | 4 | 7 | 12 | 9 | 3 | 2 | 4 | 7 | 6 | 12 |
| | 12 | 4 | 11 | 7 | 6 | 9 | 14 | - 4 | 15 | 2 |
| | 3 | 6 | - 8 | 12 | 6 | - 4 | 0 | 7 | 11 | -12 |
| | 8 | 9 | 9 | 0 | -12 | 7 | 6 | 9 | 8 | 6 |
| | 11 | 12 | 1 | - 4 | 11 | 11 | - 7 | 8 | 0 | 14 |
| | 15 | 7 | 16 | 9 | 12 | 11 | - 2 | 2 | 16 | - 1 |
| | 17 | 17 | - 6 | 3 | 25 | 15 | 21 | 24 | 23 | 26 |
| | 24 | 30 | 1 | 13 | 30 | 29 | 34 | 24 | | |
| 90 | 6 | 4 | 1 | 4 | 14 | 17 | 0 | 8 | 17 | - 4 |
| | 12 | 8 | 15 | 8 | 15 | 7 | 7 | 6 | 11 | 12 |
| | 20 | 9 | 18 | - 3 | - 4 | 14 | 13 | - 7 | 23 | 1 |
| | 3 | 3 | -13 | 15 | 15 | - 7 | 5 | 11 | 10 | -18 |
| | 16 | 18 | 7 | 1 | -12 | 6 | 15 | 5 | 13 | 9 |
| | 3 | 9 | 3 | - 8 | 17 | 14 | - 9 | 15 | - 1 | 15 |
| | 8 | 9 | 12 | 8 | 21 | 23 | - 6 | - 1 | 6 | - 5 |
| | 16 | 22 | - 9 | - 1 | 27 | 13 | 18 | 25 | 20 | 30 |
| | 30 | 37 | 3 | 22 | 27 | 31 | 41 | 26 | 34 | |
| 91 | 9 | 7 | 5 | 6 | 12 | 13 | 4 | 10 | 20 | -10 |
| | 13 | 10 | 13 | 11 | 7 | 6 | 1 | 13 | 17 | 13 |
| | 16 | 10 | 14 | 6 | - 7 | 19 | 15 | - 9 | 20 | - 1 |
| | 5 | 8 | -13 | 14 | 14 | - 9 | 3 | 7 | 11 | -12 |
| | 20 | 23 | 16 | 6 | -11 | - 0 | 10 | 5 | 17 | 14 |
| | 16 | 16 | - 3 | - 3 | 11 | 12 | - 8 | 13 | 7 | 22 |
| | 14 | 16 | 16 | 11 | 24 | 20 | - 2 | - 5 | 9 | - 5 |
| | 20 | 10 | - 9 | 5 | 33 | 19 | 22 | 23 | 25 | 30 |
| | 24 | 34 | - 3 | 23 | 39 | 34 | 37 | 21 | 41 | 37 |

### Table F6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 92 | 4 | 4 | 10 | -1 | 7 | 7 | -1 | 11 | 15 | -7 |
| | 8 | 3 | 5 | 6 | 8 | -5 | 1 | 6 | 11 | 2 |
| | 20 | 8 | 10 | -1 | -6 | 20 | 2 | -11 | 18 | 7 |
| | -3 | 3 | -22 | 17 | 12 | -14 | 6 | 0 | 10 | -17 |
| | 21 | 18 | 6 | 4 | -13 | -2 | 15 | -2 | 15 | 9 |
| | 2 | 9 | -2 | -14 | 12 | 7 | -12 | 20 | -2 | 11 |
| | 10 | 8 | 11 | 4 | 18 | 31 | -16 | -3 | 0 | -11 |
| | 11 | 12 | -17 | 4 | 32 | 11 | 13 | 14 | 16 | 29 |
| | 21 | 38 | -2 | 27 | 27 | 28 | 30 | 9 | 27 | 32 |
| | 32 | | | | | | | | | |
| 93 | -1 | 6 | 2 | 5 | -9 | 0 | -2 | -2 | 0 | 11 |
| | -5 | -6 | -7 | -2 | 3 | 7 | 5 | 6 | 3 | 4 |
| | -5 | -5 | -3 | 10 | 13 | -0 | -1 | 16 | -3 | 3 |
| | 5 | 9 | 6 | -9 | 4 | 14 | 10 | 1 | -3 | 14 |
| | -9 | -1 | 6 | -0 | 14 | -1 | 0 | 7 | 4 | -3 |
| | 9 | 3 | 2 | 10 | -5 | -4 | 14 | -4 | 7 | -2 |
| | -6 | 3 | -4 | 5 | -7 | -1 | 16 | 18 | 16 | 22 |
| | -1 | 3 | 24 | 12 | -3 | 14 | 4 | 6 | 8 | 1 |
| | 4 | 1 | 2 | 16 | 16 | 14 | 9 | 24 | 17 | 16 |
| | 16 | 11 | | | | | | | | |
| 94 | 5 | 1 | 3 | 8 | 1 | 4 | 5 | 5 | 7 | 2 |
| | 1 | 11 | 19 | -1 | 2 | 3 | 6 | 6 | 3 | 2 |
| | 4 | 6 | 5 | 4 | 9 | 5 | 8 | 3 | 6 | 4 |
| | 4 | 2 | -1 | -1 | -0 | 1 | -1 | 7 | -1 | 3 |
| | 1 | 7 | 9 | 5 | -7 | 10 | -4 | 4 | 3 | 4 |
| | 12 | 9 | 2 | 7 | 4 | 10 | 7 | 4 | 11 | 18 |
| | 10 | 10 | 11 | 5 | 5 | 2 | 7 | 1 | 9 | 12 |
| | 7 | 16 | 10 | 11 | 15 | 17 | 25 | 27 | 36 | 18 |
| | 22 | 18 | 2 | 16 | 19 | 27 | 26 | 29 | 33 | 28 |
| | 31 | 16 | 27 | | | | | | | |
| 95 | 8 | 1 | 6 | 5 | 16 | 12 | 3 | 9 | 13 | -3 |
| | 14 | 12 | 25 | 13 | 5 | 9 | 6 | 10 | 11 | 12 |
| | 21 | 6 | 13 | 7 | -1 | 17 | 12 | -5 | 21 | 2 |
| | 3 | 3 | -10 | 20 | 9 | -8 | 2 | 0 | 15 | -9 |
| | 14 | 15 | 9 | 3 | -12 | 3 | 10 | 2 | 11 | 16 |
| | 11 | 9 | -6 | -4 | 15 | 9 | -4 | 10 | 4 | 17 |
| | 16 | 13 | 20 | 10 | 18 | 23 | -6 | -5 | 3 | -8 |
| | 19 | 14 | -6 | 11 | 30 | 18 | 25 | 23 | 25 | 33 |
| | 22 | 34 | -6 | 27 | 30 | 34 | 37 | 19 | 33 | 30 |
| | 38 | 31 | 10 | 30 | | | | | | |
| 96 | 4 | 5 | 9 | 4 | -2 | -5 | 4 | 2 | 2 | 6 |
| | -5 | -1 | -3 | 4 | -1 | 2 | -2 | 7 | 3 | 2 |
| | -4 | -1 | -2 | 7 | 7 | -1 | 2 | 17 | -6 | 2 |
| | 7 | 5 | 8 | -1 | 7 | 11 | 3 | -1 | -7 | 14 |
| | -8 | 1 | 4 | 3 | 14 | -1 | 0 | 5 | 2 | -5 |
| | 8 | 5 | 2 | 12 | -10 | 1 | 18 | -4 | 15 | 4 |
| | -4 | 2 | -7 | 11 | -1 | -4 | 10 | 20 | 11 | 18 |
| | -0 | 5 | 25 | 11 | 7 | 20 | 9 | 3 | 15 | 13 |
| | 7 | 12 | 2 | 16 | 20 | 18 | 11 | 28 | 19 | 13 |
| | 21 | 13 | 39 | 31 | 20 | | | | | |

## Table F6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 97 | 5 | - 7 | 5 | 6 | - 3 | - 1 | - 2 | 5 | 6 | 4 |
| | 5 | 2 | 4 | - 8 | - 7 | - 6 | 11 | 9 | - 9 | - 0 |
| | 5 | 7 | 10 | 12 | 10 | 8 | 7 | 2 | 4 | 15 |
| | -11 | - 3 | 2 | - 7 | 2 | - 4 | 7 | - 2 | - 2 | 4 |
| | - 2 | 13 | 7 | 10 | - 1 | 6 | - 4 | - 3 | - 2 | - 0 |
| | 3 | 2 | 1 | 5 | - 6 | - 5 | 7 | - 1 | 7 | - 2 |
| | 5 | 7 | 7 | - 3 | 2 | 3 | - 4 | 9 | 3 | 19 |
| | 1 | 11 | 9 | 23 | 8 | 9 | 16 | 12 | 19 | 12 |
| | 3 | 8 | 1 | 25 | 20 | 28 | 15 | 18 | 20 | 15 |
| | 21 | 19 | 24 | 30 | 17 | 26 | | | | |
| 98 | 8 | - 0 | 5 | 8 | - 6 | - 1 | 0 | - 1 | 2 | 6 |
| | - 1 | 1 | 1 | - 7 | - 3 | - 7 | 7 | 10 | - 1 | - 1 |
| | 2 | 5 | 4 | 11 | 8 | 4 | 2 | 9 | 4 | 14 |
| | - 2 | 1 | 3 | - 2 | 8 | 6 | 9 | 0 | - 5 | 10 |
| | - 5 | 2 | 5 | 6 | - 3 | 2 | - 4 | 2 | 4 | - 5 |
| | 8 | - 1 | - 7 | 11 | - 8 | - 2 | 11 | 0 | 5 | 9 |
| | 1 | 4 | 0 | 1 | - 2 | - 1 | 0 | 16 | 6 | 20 |
| | 4 | 6 | 17 | 14 | 7 | 12 | 19 | 9 | 17 | 10 |
| | 7 | 13 | - 7 | 19 | 20 | 21 | 16 | 24 | 21 | 21 |
| | 20 | 19 | 38 | 35 | 21 | 43 | 34 | | | |
| 99 | 5 | - 1 | 3 | - 1 | - 9 | - 3 | 0 | - 6 | - 7 | 9 |
| | 0 | - 0 | - 1 | - 9 | - 6 | - 3 | 7 | 2 | - 7 | - 5 |
| | - 5 | - 3 | - 5 | 11 | 15 | - 9 | 5 | 14 | - 8 | 11 |
| | - 7 | - 2 | 13 | -14 | - 6 | 14 | 4 | - 1 | - 5 | 17 |
| | -10 | - 6 | - 1 | 5 | 9 | 11 | -10 | - 2 | - 2 | - 8 |
| | 4 | 1 | 1 | 16 | -13 | - 5 | 16 | - 8 | 4 | - 2 |
| | - 0 | 2 | - 2 | 2 | -10 | -10 | 18 | 22 | 8 | 34 |
| | - 3 | 3 | 31 | 20 | - 3 | 9 | 12 | 4 | 15 | - 0 |
| | 4 | - 5 | 1 | 11 | 10 | 9 | 2 | 25 | 16 | 7 |
| | 10 | - 0 | 45 | 35 | 10 | 40 | 36 | 42 | | |
| 100 | 3 | - 6 | 5 | 5 | - 0 | 0 | - 3 | - 4 | - 2 | 8 |
| | 0 | 7 | 2 | - 9 | -17 | - 8 | 7 | 7 | 5 | - 7 |
| | 1 | - 1 | 1 | 11 | 9 | 4 | 7 | 1 | 7 | 12 |
| | -10 | - 6 | 7 | - 5 | 2 | - 4 | - 0 | - 2 | - 0 | - 0 |
| | - 1 | 5 | - 1 | 7 | - 2 | 7 | -10 | - 1 | 1 | - 4 |
| | 10 | 1 | 1 | 6 | - 4 | - 1 | 3 | - 0 | 1 | 6 |
| | 6 | 9 | 4 | 1 | - 1 | 1 | - 3 | 20 | 6 | 16 |
| | 6 | 19 | 10 | 29 | 4 | 12 | 12 | 15 | 12 | 14 |
| | - 3 | 6 | 1 | 26 | 19 | 18 | 15 | 12 | 18 | 12 |
| | 12 | 18 | 26 | 24 | 16 | 31 | 32 | 33 | 32 | |

### Table F7

### Means and Standard Deviations on 300 SPS Items for 977 Students

| Item | Mean | S.D. | Item | Mean | S.D. | Item | Mean | S.D. |
|---|---|---|---|---|---|---|---|---|
| 1 | 1.7 | 1.0 | 44 | 3.2 | 1.4 | 87 | 1.8 | 1.0 |
| 2 | 1.6 | 1.0 | 45 | 1.9 | 1.1 | 88 | 3.1 | 1.2 |
| 3 | 1.8 | 1.0 | 46 | 2.6 | 1.4 | 89 | 2.4 | 1.2 |
| 4 | 4.1 | 1.4 | 47 | 2.2 | 1.1 | 90 | 2.6 | 1.4 |
| 5 | 1.5 | 1.0 | 48 | 3.3 | 1.5 | 91 | 2.6 | 1.3 |
| 6 | 2.7 | 1.3 | 49 | 2.9 | 1.4 | 92 | 2.0 | 1.1 |
| 7 | 1.6 | .9 | 50 | 1.7 | .9 | 93 | 3.2 | 1.6 |
| 8 | 4.1 | 1.3 | 51 | 2.4 | 1.3 | 94 | 2.2 | 1.2 |
| 9 | 1.9 | 1.1 | 52 | 3.6 | 1.5 | 95 | 3.3 | 1.3 |
| 10 | 3.6 | 1.3 | 53 | 2.2 | 1.1 | 96 | 2.6 | 1.3 |
| 11 | 1.6 | .9 | 54 | 2.6 | 1.2 | 97 | 2.7 | 1.3 |
| 12 | 1.8 | 1.2 | 55 | 2.1 | 1.2 | 98 | 2.0 | 1.3 |
| 13 | 3.2 | 1.5 | 56 | 2.9 | 1.4 | 99 | 3.8 | 1.2 |
| 14 | 1.6 | 1.0 | 57 | 2.1 | 1.2 | 100 | 3.3 | 1.5 |
| 15 | 1.6 | .9 | 58 | 3.2 | 1.4 | 101 | 1.7 | 1.0 |
| 16 | 1.8 | 1.0 | 59 | 2.1 | 1.2 | 102 | 1.8 | .9 |
| 17 | 1.8 | 1.0 | 60 | 2.6 | 1.3 | 103 | 2.1 | 1.1 |
| 18 | 2.1 | 1.0 | 61 | 2.2 | 1.1 | 104 | 1.9 | 1.1 |
| 19 | 2.6 | 1.1 | 62 | 2.6 | 1.2 | 105 | 2.0 | 1.0 |
| 20 | 2.0 | 1.1 | 63 | 1.4 | .9 | 106 | 2.9 | 1.3 |
| 21 | 3.0 | 1.6 | 64 | 2.3 | 1.3 | 107 | 1.8 | 1.0 |
| 22 | 3.9 | 1.4 | 65 | 1.5 | .9 | 108 | 3.8 | 1.3 |
| 23 | 1.6 | 1.0 | 66 | 2.1 | 1.2 | 109 | 3.3 | 1.4 |
| 24 | 2.5 | 1.2 | 67 | 1.7 | 1.0 | 110 | 2.1 | 1.1 |
| 25 | 1.6 | .9 | 68 | 3.1 | 1.4 | 111 | 2.6 | 1.3 |
| 26 | 2.7 | 1.4 | 69 | 1.9 | 1.2 | 112 | 2.1 | 1.0 |
| 27 | 1.8 | 1.1 | 70 | 2.3 | 1.1 | 113 | 2.0 | 1.1 |
| 28 | 1.7 | 1.0 | 71 | 2.0 | 1.1 | 114 | 2.6 | 1.2 |
| 29 | 1.4 | .9 | 72 | 2.4 | 1.1 | 115 | 1.7 | .9 |
| 30 | 3.3 | 1.4 | 73 | 2.4 | 1.2 | 116 | 2.8 | 1.4 |
| 31 | 1.8 | 1.1 | 74 | 1.7 | .9 | 117 | 1.8 | 1.1 |
| 32 | 2.2 | 1.1 | 75 | 3.0 | 1.4 | 118 | 1.9 | 1.0 |
| 33 | 1.7 | 1.0 | 76 | 2.1 | 1.1 | 119 | 2.0 | 1.0 |
| 34 | 2.2 | 1.1 | 77 | 3.4 | 1.5 | 120 | 4.1 | 1.3 |
| 35 | 1.7 | 1.0 | 78 | 1.8 | 1.0 | 121 | 2.1 | 1.1 |
| 36 | 2.2 | 1.1 | 79 | 2.5 | 1.2 | 122 | 1.5 | .8 |
| 37 | 2.0 | 1.3 | 80 | 1.7 | .9 | 123 | 1.8 | 1.0 |
| 38 | 1.7 | 1.0 | 81 | 2.5 | 1.1 | 124 | 2.9 | 1.3 |
| 39 | 2.3 | 1.1 | 82 | 1.8 | 1.0 | 125 | 3.2 | 1.4 |
| 40 | 2.5 | 1.4 | 83 | 2.3 | 1.2 | 126 | 2.1 | 1.1 |
| 41 | 2.5 | 1.3 | 84 | 3.5 | 1.4 | 127 | 3.2 | 1.3 |
| 42 | 2.2 | 1.3 | 85 | 2.3 | 1.2 | 128 | 2.1 | 1.0 |
| 43 | 3.3 | 1.3 | 86 | 1.9 | 1.0 | 129 | 2.1 | 1.0 |

Table F7 Continued

| Item | Mean | S.D. | Item | Mean | S.D. | Item | Mean | S.D. |
|---|---|---|---|---|---|---|---|---|
| 130 | 2.2 | 1.0 | 178 | 2.1 | 1.0 | 226 | 2.0 | 1.0 |
| 131 | 2.2 | 1.0 | 179 | 3.0 | 1.2 | 227 | 2.7 | 1.2 |
| 132 | 2.4 | 1.2 | 180 | 2.2 | 1.0 | 228 | 2.5 | 1.3 |
| 133 | 1.9 | 1.0 | 181 | 2.3 | 1.1 | 229 | 2.6 | 1.3 |
| 134 | 2.0 | 1.1 | 182 | 1.9 | 1.0 | 230 | 2.1 | 1.1 |
| 135 | 3.4 | 1.3 | 183 | 2.2 | 1.0 | 231 | 2.5 | 1.1 |
| 136 | 1.8 | .9 | 184 | 2.1 | 1.0 | 232 | 2.2 | 1.2 |
| 137 | 2.2 | 1.0 | 185 | 3.2 | 1.3 | 233 | 1.9 | 1.0 |
| 138 | 2.6 | 1.3 | 186 | 2.2 | 1.1 | 234 | 2.1 | 1.0 |
| 139 | 2.3 | 1.2 | 187 | 1.9 | 1.0 | 235 | 2.0 | 1.1 |
| 140 | 2.1 | 1.1 | 188 | 2.2 | 1.0 | 236 | 2.1 | 1.2 |
| 141 | 1.8 | 1.0 | 189 | 2.0 | 1.0 | 237 | 2.7 | 1.2 |
| 142 | 1.8 | 1.0 | 190 | 2.5 | 1.2 | 238 | 2.1 | 1.1 |
| 143 | 2.3 | 1.0 | 191 | 2.7 | 1.0 | 239 | 2.0 | 1.1 |
| 144 | 2.6 | 1.2 | 192 | 2.3 | 1.2 | 240 | 1.8 | 1.1 |
| 145 | 2.0 | 1.1 | 193 | 1.7 | 1.0 | 241 | 3.2 | 1.4 |
| 146 | 2.8 | 1.2 | 194 | 2.9 | 1.4 | 242 | 2.5 | 1.3 |
| 147 | 2.0 | 1.1 | 195 | 1.8 | 1.0 | 243 | 2.4 | 1.4 |
| 148 | 1.5 | .9 | 196 | 2.5 | 1.0 | 244 | 2.6 | 1.4 |
| 149 | 2.0 | 1.2 | 197 | 3.0 | 1.1 | 245 | 2.7 | 1.2 |
| 150 | 2.4 | 1.3 | 198 | 1.6 | .8 | 246 | 1.7 | 1.0 |
| 151 | 2.6 | 1.2 | 199 | 2.1 | 1.0 | 247 | 1.8 | 1.1 |
| 152 | 2.7 | 1.3 | 200 | 2.4 | 1.3 | 248 | 2.8 | 1.3 |
| 153 | 2.4 | 1.0 | 201 | 3.5 | 1.4 | 249 | 3.6 | 1.5 |
| 154 | 3.9 | 1.3 | 202 | 2.3 | 1.0 | 250 | 2.9 | 1.2 |
| 155 | 2.0 | 1.0 | 203 | 2.8 | 1.2 | 251 | 3.0 | 1.2 |
| 156 | 2.0 | 1.2 | 204 | 2.8 | 1.2 | 252 | 2.0 | 1.2 |
| 157 | 2.8 | 1.2 | 205 | 1.9 | 1.1 | 253 | 2.5 | 1.2 |
| 158 | 3.2 | 1.4 | 206 | 1.7 | 1.0 | 254 | 2.6 | 1.3 |
| 159 | 3.1 | 1.3 | 207 | 2.7 | 1.2 | 255 | 2.2 | 1.1 |
| 160 | 1.8 | 1.0 | 208 | 2.4 | 1.1 | 256 | 1.9 | 1.2 |
| 161 | 1.9 | 1.0 | 209 | 2.0 | 1.0 | 257 | 1.8 | 1.1 |
| 162 | 3.2 | 1.3 | 210 | 3.3 | 1.3 | 258 | 2.1 | 1.1 |
| 163 | 2.7 | 1.3 | 211 | 2.7 | 1.2 | 259 | 3.5 | 1.4 |
| 164 | 2.9 | 1.4 | 212 | 2.4 | 1.1 | 260 | 2.5 | 1.3 |
| 165 | 1.7 | 1.0 | 213 | 2.0 | 1.1 | 261 | 1.8 | 1.0 |
| 166 | 2.2 | 1.0 | 214 | 1.9 | 1.0 | 262 | 2.0 | 1.1 |
| 167 | 3.1 | 1.3 | 215 | 3.7 | 1.3 | 263 | 2.3 | 1.1 |
| 168 | 2.2 | 1.1 | 216 | 2.1 | 1.2 | 264 | 2.6 | 1.3 |
| 169 | 2.9 | 1.3 | 217 | 2.5 | 1.1 | 265 | 3.8 | 1.5 |
| 170 | 3.4 | 1.3 | 218 | 3.0 | 1.3 | 266 | 3.0 | 1.4 |
| 171 | 3.4 | 1.4 | 219 | 3.8 | 1.4 | 267 | 2.2 | 1.1 |
| 172 | 3.7 | 1.5 | 220 | 2.2 | 1.2 | 268 | 2.4 | 1.2 |
| 173 | 2.6 | 1.2 | 221 | 2.0 | 1.1 | 269 | 2.9 | 1.3 |
| 174 | 1.8 | 1.0 | 222 | 2.4 | 1.2 | 270 | 1.9 | 1.1 |
| 175 | 2.1 | 1.1 | 223 | 1.8 | 1.1 | 271 | 1.9 | 1.0 |
| 176 | 2.0 | 1.0 | 224 | 1.8 | 1.1 | 272 | 2.0 | 1.2 |
| 177 | 3.0 | 1.2 | 225 | 1.9 | 1.1 | 273 | 2.0 | 1.1 |

Table F7 Continued

| Item | Mean | S.D. | Item | Mean | S.D. | Item | Mean | S.D. |
|---|---|---|---|---|---|---|---|---|
| 274 | 2.0 | 1.2 | 283 | 2.0 | 1.1 | 292 | 3.1 | 1.5 |
| 275 | 1.9 | 1.1 | 284 | 3.0 | 1.5 | 293 | 3.3 | 1.5 |
| 276 | 1.5 | 1.0 | 285 | 1.9 | 1.2 | 294 | 2.6 | 1.2 |
| 277 | 2.1 | 1.2 | 286 | 2.2 | 1.1 | 295 | 1.9 | 1.1 |
| 278 | 2.7 | 1.3 | 287 | 2.0 | 1.1 | 296 | 2.9 | 1.5 |
| 279 | 3.0 | 1.4 | 288 | 2.8 | 1.3 | 297 | 3.3 | 1.5 |
| 280 | 1.7 | 1.1 | 289 | 3.3 | 1.5 | 298 | 3.5 | 1.5 |
| 281 | 2.2 | 1.2 | 290 | 3.0 | 1.3 | 299 | 2.9 | 1.5 |
| 282 | 2.6 | 1.2 | 291 | 2.6 | 1.4 | 300 | 2.3 | 1.3 |

# Appendix G

## Analysis of FPS Data

The analysis used for discovering the basic dimensions of the Junior College Environment Scales was again adapted for analysis of the Faculty Preference Scales with the following differences. For instrument development, as indicated in Appendix F, individual faculty members were used since the instrument permitted them to describe their own individual attitudes toward a college environment. Since the file of FPS data was smaller the computer was instructed to select every fourth respondent throughout the file, i.e. cases 1, 5, 9, ---, etc.) This resulted in the sample of 779 cases which was assumed to be sufficient for the first principal component analyses.

The items were seperated into three sets. The correlation matrices for these three sets of items are reported in Tables G4, G5, and G6. Principal component-varimax analyses were performed on each set. Factor scores were computed for each case and correlated with the item score. The correlation of all items with these three sets of factors are recorded in Tables G1, G2, and G3.

As with the JCES and SPS analysis, this permitted the matching of factors across the three batteries of items and the selection of items which best define a given factor. In order to further purify the dimensions each set of items was then subjected to principal component-varimax analysis, loading of ±.35 was required for an item to be retained. These loadings were significant at the one percent level (Harmon, 1960).

Item analyses described in Appendix J and elsewhere were performed on another sample of 779 faculty members selected by choosing every fourth respondent beginning with respondent number two. This provided "cross validation" foundation to some extent.

Table F7 reports the mean and standard deviation of each of the 300 items for the original sample of 779 faculty members.

## Table G1

## Correlation of all FPS Item Scores and Factor Scores from Principal Component-Varimax Analysis of Items 1; 4; 7; ---298

| | Factor | | | | | |
|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | 25 | -26 | -48 | 2 | 54 | - 3 |
| 2 | - 6 | -32 | -43 | - 9 | 48 | -13 |
| 3 | 22 | 12 | -19 | 13 | 18 | - 6 |
| 4 | 22 | 42 | 14 | -46 | 15 | 0 |
| 5 | 38 | -15 | -30 | 33 | 21 | 11 |
| 6 | - 3 | 39 | - 6 | 10 | - 9 | 3 |
| 7 | 23 | - 5 | -17 | - 6 | - 8 | 59 |
| 8 | 9 | 31 | 5 | -44 | 28 | -25 |
| 9 | 28 | -24 | -36 | -26 | 65 | - 3 |
| 10 | 29 | 23 | -12 | -18 | 41 | -17 |
| 11 | 18 | -40 | -51 | 15 | 43 | 7 |
| 12 | -24 | -22 | -24 | 5 | 14 | 2 |
| 13 | 5 | - 5 | -38 | - 9 | 51 | -19 |
| 14 | 17 | -14 | -29 | 55 | 4 | - 2 |
| 15 | -20 | -37 | -23 | -13 | - 1 | 50 |
| 16 | -27 | -18 | -45 | 32 | 18 | -10 |
| 17 | -20 | - 6 | -27 | 50 | - 6 | - 6 |
| 18 | 13 | 14 | -19 | -21 | 20 | 22 |
| 19 | 13 | -36 | -49 | -22 | 57 | 11 |
| 20 | 18 | -11 | -39 | 9 | 36 | 3 |
| 21 | -13 | 35 | 5 | 39 | -20 | -26 |
| 22 | 26 | 65 | 24 | -11 | - 3 | -21 |
| 23 | -13 | - 8 | -21 | 49 | - 7 | - 4 |
| 24 | -41 | - 9 | -22 | 31 | - 3 | -18 |
| 25 | 17 | -44 | -43 | - 8 | 66 | - 9 |
| 26 | 37 | -21 | -29 | -23 | 44 | 23 |
| 27 | 13 | 10 | -24 | 29 | 10 | 6 |
| 28 | -47 | -12 | -20 | 38 | 2 | -26 |
| 29 | - 9 | -41 | -39 | 9 | 33 | 6 |
| 30 | -22 | 37 | 22 | 33 | -35 | -28 |
| 31 | -16 | -23 | -39 | 32 | 3 | 24 |
| 32 | 8 | 7 | -19 | 6 | 3 | 23 |
| 33 | -13 | -13 | -33 | 6 | 5 | 27 |
| 34 | 14 | - 3 | -11 | -15 | -15 | 72 |
| 35 | -37 | -15 | -18 | 61 | -13 | -29 |
| 36 | -25 | - 6 | -19 | 4 | -11 | 29 |
| 37 | - 5 | -15 | -33 | 18 | - 0 | 25 |
| 38 | 14 | -19 | -21 | 28 | 4 | 14 |
| 39 | -33 | -44 | -34 | 44 | 13 | -18 |
| 40 | -64 | - 2 | - 8 | - 8 | - 2 | -17 |

Table G1 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 41 | - 2 | 10 | -35 | 9 | 25 | - 7 |
| 42 | 24 | - 7 | -27 | 31 | - 1 | 29 |
| 43 | 7 | 51 | 10 | -36 | 2 | 10 |
| 44 | 42 | - 9 | -24 | -32 | 37 | 37 |
| 45 | -32 | 3 | -36 | 7 | 13 | - 7 |
| 46 | -19 | 4 | -44 | 6 | 23 | - 9 |
| 47 | 13 | 11 | --9 | 25 | -32 | 58 |
| 48 | -35 | -19 | -43 | - 6 | 40 | -29 |
| 49 | 14 | - 2 | -14 | -48 | 38 | 16 |
| 50 | 28 | -38 | -34 | 4 | 14 | 51 |
| 51 | -14 | -20 | -13 | -22 | 0 | 39 |
| 52 | 41 | 1 | -13 | -36 | 16 | 53 |
| 53 | 36 | -10 | -38 | -25 | 61 | 5 |
| 54 | 21 | 5 | -25 | -28 | 56 | -22 |
| 55 | 14 | 16 | -30 | - 5 | 19 | 14 |
| 56 | 24 | 20 | -16 | -21 | 29 | - 3 |
| 57 | 37 | -27 | -41 | - 3 | 30 | 40 |
| 58 | 40 | 0 | -27 | -32 | 58 | - 9 |
| 59 | 28 | 0 | -19 | -24 | 22 | 33 |
| 60 | -59 | -11 | -29 | -25 | 21 | -14 |
| 61 | 1 | 10 | -20 | 58 | -19 | 9 |
| 62 | 11 | 35 | -10 | 48 | - 5 | -11 |
| 63 | 5 | -18 | -38 | 20 | 20 | 19 |
| 64 | 11 | -33 | -39 | 9 | 59 | -33 |
| 65 | -25 | -14 | -18 | 39 | -25 | 35 |
| 66 | 0 | -15 | -32 | -15 | 37 | 18 |
| 67 | -58 | -18 | -38 | 23 | 2 | - 6 |
| 68 | 38 | -14 | -25 | 13 | 52 | -38 |
| 69 | 6 | 2 | -16 | 65 | 1 | -28 |
| 70 | 23 | -29 | -45 | 37 | 43 | -10 |
| 71 | -10 | 18 | -12 | 51 | -26 | 9 |
| 72 | -10 | 38 | 7 | 10 | -14 | - 5 |
| 73 | 23 | 6 | -24 | 38 | 19 | -10 |
| 74 | -10 | 3 | -13 | 19 | -26 | 47 |
| 75 | -51 | 38 | 12 | 4 | -26 | -26 |
| 76 | 3 | 41 | - 6 | 2 | -13 | 27 |
| 77 | - 1 | 32 | 0 | - 9 | -20 | 49 |
| 78 | -18 | -15 | -35 | 16 | 35 | -17 |
| 79 | -14 | 11 | - 7 | 60 | - 5 | -31 |
| 80 | -10 | 5 | -17 | 44 | -11 | 5 |
| 81 | 28 | - 6 | -15 | -28 | 16 | 52 |
| 82 | 26 | -51 | -47 | -16 | 63 | 15 |
| 83 | 0 | 22 | 1 | - 9 | -24 | 51 |
| 84 | 22 | 42 | 13 | -20 | -14 | 28 |
| 85 | 5 | 20 | -11 | 74 | -22 | -15 |
| 86 | -20 | -11 | -23 | 64 | - 3 | -26 |
| 87 | - 4 | - 4 | -30 | 11 | 2 | 36 |

Table G1 Continued

Factor

| Item | 1 | 2 |  | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 88 | 23 | 43 | 10 | -11 | -15 | 34 |
| 89 | - 9 | 34 | 9 | 26 | -30 | 7 |
| 90 | 24 | - 1 | 1 | -48 | 16 | 41 |
| 91 | -21 | 30 | -13 | 10 | -30 | 29 |
| 92 | -22 | 1 | -37 | 8 | 12 | 15 |
| 93 | -26 | 23 | -22 | 2 | 0 | - 3 |
| 94 | -71 | 6 | -26 | - 1 | 4 | -18 |
| 95 | 25 | 47 | 27 | -20 | -37 | 55 |
| 96 | -27 | 33 | - 9 | -19 | 3 | - 2 |
| 97 | -34 | 23 | -18 | 5 | -12 | 10 |
| 98 | -16 | 9 | -24 | 22 | -19 | 30 |
| 99 | 15 | 56 | 35 | 10 | -51 | 32 |
| 100 | 27 | 49 | 17 | -36 | 10 | -12 |
| 101 | 15 | - 1 | -31 | 4 | 22 | 13 |
| 102 | -40 | -10 | -16 | 12 | -19 | 27 |
| 103 | 10 | -31 | -53 | -16 | 67 | -17 |
| 104 | -39 | -25 | -34 | 52 | 6 | -30 |
| 105 | 10 | 30 | -24 | - 3 | 17 | 8 |
| 106 | 13 | 21 | -23 | - 5 | 17 | 2 |
| 107 | -57 | -17 | -24 | -16 | - 1 | 26 |
| 108 | 39 | 45 | 12 | 12 | 2 | -16 |
| 109 | - 3 | - 3 | -20 | 31 | 17 | -46 |
| 110 | -62 | - 2 | - 8 | 41 | -36 | - 9 |
| 111 | -29 | 19 | - 1 | 3 | 3 | -32 |
| 112 | -50 | -29 | -30 | 30 | 18 | -37 |
| 113 | - 6 | -21 | -38 | 61 | 16 | -29 |
| 114 | 22 | -16 | -35 | 49 | 32 | -22 |
| 115 | -19 | - 4 | -45 | 18 | 27 | 1 |
| 116 | - 3 | -26 | -45 | 29 | 36 | - 8 |
| 117 | -44 | -11 | -24 | 58 | -22 | -10 |
| 118 | 9 | -23 | -36 | 61 | 24 | -24 |
| 119 | -33 | -22 | -38 | 28 | 23 | -19 |
| 120 | 19 | 52 | 13 | -12 | 19 | -36 |
| 121 | -15 | 7 | - 9 | - 5 | -16 | 58 |
| 122 | 11 | -16 | -19 | - 5 | 6 | 57 |
| 123 | -30 | 15 | -14 | 26 | -15 | 14 |
| 124 | 25 | 26 | - 4 | 54 | -18 | 8 |
| 125 | -43 | 19 | 8 | -16 | -26 | 35 |
| 126 | -20 | 3 | -23 | 29 | 14 | -16 |
| 127 | 3 | 66 | 13 | -21 | - 6 | 10 |
| 128 | 25 | - 6 | -20 | 55 | - 6 | 22 |
| 129 | 24 | 10 | - 0 | 3 | -21 | 66 |
| 130 | - 3 | 8 | -19 | 51 | -25 | 31 |
| 131 | -12 | 10 | - 8 | -23 | - 4 | 56 |
| 132 | 16 | - 5 | -18 | -24 | 28 | 24 |
| 133 | 4 | -11 | -28 | 29 | 0 | 45 |
| 134 | -49 | 3 | - 9 | -17 | - 7 | 19 |
| 135 | 35 | 25 | 4 | -54 | 34 | 9 |
| 136 | -24 | -12 | -43 | -19 | 34 | 14 |

Table G1 Continued

| | Factor | | | | | |
|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 |
| 137 | -34 | -20 | -27 | -20 | 36 | -8 |
| 138 | 13 | 28 | -3 | 21 | -2 | 20 |
| 139 | 25 | 14 | 8 | -12 | -6 | 62 |
| 140 | -16 | 10 | -6 | -1 | -9 | 46 |
| 141 | -47 | -19 | -25 | 22 | 14 | -24 |
| 142 | -21 | 16 | -15 | 73 | -23 | -15 |
| 143 | -47 | -13 | -28 | -16 | 22 | -6 |
| 144 | -18 | -38 | -35 | -8 | 44 | -6 |
| 145 | 7 | -4 | -9 | -14 | -15 | 78 |
| 146 | 19 | 40 | 17 | -6 | -31 | 56 |
| 147 | -34 | 15 | -16 | 10 | 1 | 5 |
| 148 | -31 | -41 | -43 | -7 | 44 | -4 |
| 149 | -10 | -12 | -17 | -28 | 22 | 37 |
| 150 | -38 | -29 | -34 | 20 | 30 | -41 |
| 151 | -13 | 4 | -13 | -37 | 29 | 11 |
| 152 | -8 | 21 | -20 | 12 | 11 | 10 |
| 153 | 11 | 10 | -12 | -22 | 31 | 3 |
| 154 | 24 | 69 | 22 | -30 | 7 | -3 |
| 155 | -48 | -48 | -36 | -20 | 39 | -10 |
| 156 | 9 | 10 | -14 | -17 | 44 | -10 |
| 157 | -5 | 11 | -9 | -24 | 25 | 10 |
| 158 | -17 | 13 | -6 | -20 | 0 | 23 |
| 159 | -23 | -42 | -26 | -38 | 32 | 23 |
| 160 | 23 | -42 | -40 | -4 | 65 | -18 |
| 161 | -13 | -3 | -30 | 29 | 14 | 14 |
| 162 | -30 | 43 | 22 | -26 | -11 | 1 |
| 163 | 18 | 23 | -17 | 52 | 4 | -12 |
| 164 | 23 | 48 | 24 | -4 | -28 | 42 |
| 165 | 23 | -13 | -37 | 15 | 43 | 9 |
| 166 | -3 | -9 | -32 | 12 | 37 | 10 |
| 167 | -22 | 55 | 23 | -24 | 4 | -24 |
| 168 | 13 | -38 | -37 | 5 | 37 | 36 |
| 169 | 47 | 18 | 10 | 12 | -3 | 39 |
| 170 | 6 | 49 | 30 | -44 | -13 | 38 |
| 171 | 34 | 17 | 8 | -20 | 20 | 6 |
| 172 | 28 | 65 | 39 | 0 | -27 | 27 |
| 173 | 15 | 30 | 14 | 14 | -33 | 62 |
| 174 | 11 | 4 | -12 | 42 | -16 | 50 |
| 175 | -8 | 27 | -17 | 29 | 3 | 22 |
| 176 | 6 | 17 | -7 | 31 | -12 | 27 |
| 177 | 0 | 41 | 23 | -25 | -24 | 48 |
| 178 | 13 | 13 | 4 | 35 | -35 | 59 |
| 179 | 12 | 46 | 13 | 6 | -15 | 26 |
| 180 | 40 | -38 | -37 | -1 | 60 | 13 |
| 181 | -64 | 5 | -5 | -10 | 4 | -8 |
| 182 | -61 | 3 | -12 | 20 | -5 | -6 |

Table G1 Continued

| | Factor | | | | | |
|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 |
| 183 | -11 | 18 | - 1 | -19 | 2 | 33 |
| 184 | - 9 | -21 | -17 | 4 | - 7 | 61 |
| 185 | -19 | 12 | - 3 | 33 | -13 | |
| 186 | 22 | 16 | 1 | - 4 | 7 | 36 |
| 187 | 2 | -36 | -37 | -21 | 64 | 3 |
| 188 | -30 | -13 | - 7 | 20 | -30 | 51 |
| 189 | -66 | -24 | -16 | 2 | - 4 | 12 |
| 190 | -39 | - 1 | 2 | -11 | -11 | 41 |
| 191 | -52 | 0 | -12 | - 5 | 21 | -19 |
| 192 | -21 | 2 | -13 | 33 | 6 | -14 |
| 193 | -50 | 2 | -11 | 19 | -16 | 23 |
| 194 | -11 | 36 | 9 | -28 | 20 | -22 |
| 195 | - 1 | -38 | -41 | 32 | 51 | -34 |
| 196 | -20 | 40 | - 2 | 25 | 2 | -13 |
| 197 | 10 | 37 | 11 | 12 | 7 | -13 |
| 198 | - 6 | -22 | -26 | 2 | 21 | 32 |
| 199 | -60 | -27 | -24 | 7 | 15 | - 7 |
| 200 | -41 | 5 | - 5 | - 7 | 8 | 2 |
| 201 | 25 | 52 | 33 | - 6 | -22 | 18 |
| 202 | 13 | 16 | 8 | -22 | -13 | 71 |
| 203 | 9 | 42 | 20 | - 9 | 10 | -23 |
| 204 | 7 | 43 | 22 | 30 | -18 | -12 |
| 205 | -77 | -12 | -10 | 2 | 2 | -14 |
| 206 | -51 | -36 | -24 | -12 | 26 | 1 |
| 207 | - 3 | 26 | 0 | -12 | 17 | 15 |
| 208 | 7 | 47 | 25 | 31 | -16 | -16 |
| 209 | -26 | 7 | - 1 | 19 | 4 | -28 |
| 210 | 44 | 45 | 29 | 5 | -17 | 12 |
| 211 | - 4 | 9 | - 8 | 15 | 33 | -27 |
| 212 | - 4 | - 7 | -18 | 2 | 34 | 8 |
| 213 | - 3 | - 5 | -21 | 14 | 35 | - 1 |
| 214 | 16 | -47 | -43 | - 6 | 74 | 2 |
| 215 | 6 | 64 | 32 | 13 | -14 | -26 |
| 216 | 17 | - 4 | -25 | 27 | 32 | - 2 |
| 217 | 0 | 2 | -18 | 6 | 34 | -12 |
| 218 | -15 | 10 | - 2 | -12 | 25 | -10 |
| 219 | -16 | 39 | 26 | 16 | - 6 | -51 |
| 220 | 7 | 16 | 0 | 67 | -22 | - 4 |
| 221 | -20 | 15 | - 6 | 8 | - 2 | 33 |
| 222 | 2 | - 1 | - 4 | -31 | 48 | -14 |
| 223 | 8 | -16 | -15 | 4 | 9 | 58 |
| 224 | -33 | -47 | -29 | -21 | 39 | 12 |
| 225 | -11 | 19 | - 3 | 33 | - 7 | 20 |
| 226 | -16 | 23 | - 1 | 22 | - 4 | 25 |
| 227 | 36 | - 5 | -10 | -29 | 61 | - 3 |
| 228 | -44 | 12 | 1 | 43 | -31 | - 2 |
| 229 | -37 | -40 | -28 | 13 | 14 | 19 |
| 230 | -22 | -33 | -25 | -22 | 61 | -31 |

Table G1 Continued

| Item | Factor 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 231 | -13 | -34 | -25 | 25 | 30 | -12 |
| 232 | -17 | -58 | -31 | -18 | 49 | 17 |
| 233 | -58 | -31 | -14 | -18 | 11 | 21 |
| 234 | -60 | -14 | - 9 | - 5 | -11 | 37 |
| 235 | -12 | - 4 | -17 | - 3 | 20 | 34 |
| 236 | -26 | -10 | - 6 | -14 | 6 | 40 |
| 237 | -42 | -31 | -16 | -31 | 45 | -16 |
| 238 | -63 | -19 | - 7 | -15 | - 9 | 35 |
| 239 | -18 | -31 | -23 | -21 | 32 | 21 |
| 240 | -20 | - 4 | -11 | 72 | -19 | - 7 |
| 241 | 18 | 50 | 35 | -25 | 12 | -11 |
| 242 | 5 | 45 | 24 | -25 | - 7 | 23 |
| 243 | -21 | 3 | -13 | - 6 | 26 | - 9 |
| 244 | -63 | 23 | 5 | 2 | -18 | - 8 |
| 245 | 23 | 14 | - 6 | 5 | 38 | -30 |
| 246 | -28 | -23 | -28 | 8 | 19 | 10 |
| 247 | - 1 | 25 | - 7 | 51 | - 4 | -18 |
| 248 | -51 | 28 | 24 | -28 | -23 | 6 |
| 249 | - 2 | 67 | 41 | -24 | -16 | -14 |
| 250 | -38 | 28 | 16 | -25 | 8 | -15 |
| 251 | 29 | 40 | 19 | -15 | 18 | - 6 |
| 252 | 17 | 26 | 15 | --3 | -10 | 30 |
| 253 | -27 | 36 | 23 | -34 | - 9 | 11 |
| 254 | 29 | - 6 | -18 | - 4 | 51 | -11 |
| 255 | 29 | 36 | 21 | 39 | -36 | 28 |
| 256 | 15 | - 4 | -13 | -10 | 32 | 33 |
| 257 | 21 | -20 | -20 | - 1 | 33 | 25 |
| 258 | -34 | 19 | 2 | 17 | - 8 | - 3 |
| 259 | 10 | 67 | 39 | -13 | -18 | - 2 |
| 260 | 0 | 33 | 10 | -13 | 11 | - 7 |
| 261 | -15 | -50 | -36 | -18 | 45 | 16 |
| 262 | -63 | -27 | -27 | - 6 | 25 | -20 |
| 263 | 27 | -24 | -24 | - 3 | 46 | 14 |
| 264 | 15 | -19 | - 8 | -17 | 17 | 44 |
| 265 | 19 | 67 | 38 | -32 | - 5 | - 1 |
| 266 | - 3 | 60 | 29 | 6 | -12 | -25 |
| 267 | - 6 | - 5 | -22 | 13 | 32 | 1 |
| 268 | 17 | -13 | - 8 | -28 | 28 | 44 |
| 269 | 29 | 26 | 12 | -14 | 7 | 22 |
| 270 | -12 | -55 | -37 | - 6 | 36 | 21 |
| 271 | 30 | 2 | - 8 | 13 | 22 | 22 |
| 272 | -18 | 6 | -10 | 21 | 9 | 4 |
| 273 | - 0 | 11 | - 6 | 28 | - 7 | 26 |
| 274 | - 2 | 19 | - 3 | 71 | -24 | - 5 |
| 275 | 40 | -34 | -20 | -25 | 46 | 35 |
| 276 | 2 | - 2 | - 8 | 35 | -11 | 34 |
| 277 | 14 | 4 | - 7 | 30 | 6 | 17 |
| 278 | 19 | 10 | - 4 | 5 | 25 | 3 |

Table G1 Continued

| Item | Factor<br>1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 279 | 51 | 2 | 6 | -27 | 25 | 30 |
| 280 | 2 | - 9 | - 3 | - 8 | -16 | 68 |
| 281 | -16 | 3 | - 9 | -15 | 19 | 19 |
| 282 | 14 | - 1 | - 8 | 25 | 24 | -21 |
| 283 | -70 | - 7 | -10 | 9 | - 9 | 2 |
| 284 | -12 | 55 | 26 | 20 | -21 | -35 |
| 285 | -14 | - 0 | - 8 | - 6 | 4 | 40 |
| 286 | -18 | - 2 | - 1 | -14 | 9 | 29 |
| 287 | 6 | -21 | -26 | 55 | 14 | -16 |
| 288 | 5 | 21 | 18 | -42 | -12 | 44 |
| 289 | -22 | 54 | 38 | - 1 | -37 | - 0 |
| 290 | 35 | 43 | 19 | 37 | -10 | -29 |
| 291 | 2 | 27 | 20 | 29 | -31 | 14 |
| 292 | -14 | 43 | 23 | 42 | -34 | -31 |
| 293 | -15 | 60 | 31 | -13 | -10 | -27 |
| 294 | -27 | 47 | 24 | -33 | - 3 | - 8 |
| 295 | -28 | 17 | - 6 | 7 | 3 | - 4 |
| 296 | -29 | 26 | 5 | - 3 | 3 | -13 |
| 297 | 21 | 49 | 26 | 17 | - 0 | -36 |
| 298 | -25 | 56 | 36 | -28 | - 6 | -26 |
| 299 | -16 | 34 | 9 | 22 | -11 | -22 |
| 300 | - 4 | 23 | 20 | -13 | -37 | 61 |

Table G2

Correlation of all FPS Item
Scores and Factor Scores from
Principal Component-Varimax
Analysis of Items 2, 5, 8, ---, 299

| | Factor | | | | | | |
|---|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | -26 | 51 | 3 | 48 | 25 | 14 | - 9 |
| 2 | -39 | 30 | - 3 | 44 | 19 | 14 | 22 |
| 3 | - 7 | 22 | - 5 | 29 | 16 | -10 | -25 |
| 4 | - 6 | - 4 | 49 | 34 | 36 | -41 | - 1 |
| 5 | 7 | 54 | -18 | 30 | 16 | 21 | -41 |
| 6 | 22 | -17 | - 2 | 16 | 10 | -27 | - 6 |
| 7 | 45 | 29 | 19 | 6 | 32 | 27 | 1 |
| 8 | -33 | -11 | 39 | 42 | 31 | -45 | 5 |
| 9 | -36 | 55 | 28 | 56 | 40 | 6 | 3 |
| 10 | -23 | 19 | 26 | 47 | 33 | -32 | -13 |
| 11 | -18 | 54 | -15 | 44 | 23 | 34 | - 7 |
| 12 | - 5 | 5 | -20 | 2 | 0 | 17 | 22 |
| 13 | -32 | 18 | - 0 | 40 | 25 | -13 | 5 |
| 14 | 8 | 29 | -51 | 7 | -10 | 17 | -41 |
| 15 | 26 | 19 | 6 | -10 | 18 | 49 | 45 |
| 16 | - 8 | 6 | -43 | 11 | - 2 | 11 | 9 |
| 17 | 10 | - 8 | -60 | - 9 | -13 | 6 | - 7 |
| 18 | 11 | 15 | 23 | 31 | 39 | -12 | 4 |
| 19 | -23 | 47 | 13 | 44 | 39 | 18 | 13 |
| 20 | - 9 | 41 | -11 | 37 | 40 | 4 | -13 |
| 21 | 10 | -30 | -36 | - 8 | -17 | 31 | -18 |
| 22 | 1 | -20 | 25 | 24 | 19 | -61 | -33 |
| 23 | 14 | 2 | -54 | -17 | -13 | 14 | - 8 |
| 24 | - 6 | -18 | -45 | - 6 | -23 | 4 | 19 |
| 25 | -40 | 58 | 3 | 41 | 32 | 20 | 6 |
| 26 | - 6 | 62 | 37 | 45 | 56 | 18 | 0 |
| 27 | 15 | 22 | -17 | 19 | 16 | - 3 | -18 |
| 28 | -13 | -18 | -49 | - 8 | -23 | 6 | 20 |
| 29 | -13 | 38 | -19 | 12 | 19 | 33 | 21 |
| 30 | 9 | -47 | -35 | -24 | -28 | -29 | -13 |
| 31 | 18 | 13 | -34 | - 4 | 7 | 26 | 11 |
| 32 | 26 | 12 | - 6 | 7 | 49 | 3 | - 2 |
| 33 | 18 | 8 | -13 | 9 | 21 | 20 | 21 |
| 34 | 56 | 19 | 24 | - 3 | 43 | 28 | 15 |
| 35 | - 8 | -21 | -76 | -28 | -44 | 11 | - 3 |
| 36 | 28 | -11 | -16 | - 8 | 10 | 15 | 28 |
| 37 | 18 | 11 | -19 | 5 | 11 | 21 | 3 |
| 38 | 14 | 27 | -21 | 2 | 4 | 26 | -17 |
| 39 | -18 | 11 | -56 | - 8 | -25 | 34 | 13 |
| 40 | -13 | -42 | -23 | -10 | -16 | - 3 | 50 |

### Table G2 Continued

| | Factor | | | | | | |
|---|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 41 | - 8 | 8 | - 9 | 45 | 22 | -16 | - 2 |
| 42 | 29 | 34 | -12 | 14 | 10 | 22 | -22 |
| 43 | 14 | -22 | 37 | 18 | 37 | -42 | 9 |
| 44 | 10 | 57 | 48 | 43 | 61 | 12 | - 1 |
| 45 | - 4 | -11 | -20 | 18 | 4 | - 8 | 21 |
| 46 | - 7 | 0 | -11 | 31 | 11 | - 8 | 13 |
| 47 | 69 | 13 | - 2 | - 9 | 15 | 22 | - 9 |
| 48 | -41 | - 1 | -16 | 30 | 2 | - 2 | 33 |
| 49 | -10 | 19 | 40 | 32 | 48 | - 6 | 22 |
| 50 | 30 | 60 | 11 | 16 | 32 | 52 | - 2 |
| 51 | 19 | 5 | 16 | - 3 | 20 | 29 | 38 |
| 52 | 26 | 41 | 53 | 35 | 55 | 14 | 1 |
| 53 | -25 | 58 | 35 | 69 | 56 | - 2 | - 6 |
| 54 | -38 | 29 | 26 | 58 | 38 | -24 | - 4 |
| 55 | 9 | 16 | 7 | 30 | 39 | - 7 | - 3 |
| 56 | -11 | 20 | 30 | 56 | 43 | -22 | - 9 |
| 57 | 14 | 62 | 19 | 38 | 42 | 36 | - 9 |
| 58 | -30 | 44 | 37 | 62 | 49 | -13 | -12 |
| 59 | 17 | 37 | 36 | 39 | 55 | 7 | 2 |
| 60 | -24 | -24 | - 4 | 18 | - 1 | - 1 | 61 |
| 61 | 29 | 2 | -44 | - 3 | -15 | 7 | -26 |
| 62 | 16 | - 5 | -31 | 13 | - 4 | -30 | -38 |
| 63 | 10 | 31 | -19 | 20 | 15 | 21 | - 5 |
| 64 | -47 | 38 | -18 | 36 | 8 | 5 | -10 |
| 65 | 47 | - 1 | -38 | -24 | - 9 | 34 | 14 |
| 66 | - 5 | 26 | 8 | 30 | 27 | 8 | 21 |
| 67 | - 4 | -20 | -44 | - 3 | -20 | 14 | 39 |
| 68 | -49 | 44 | - 5 | 44 | 11 | -11 | -41 |
| 69 | - 6 | 6 | -59 | - 3 | -29 | - 5 | -41 |
| 70 | -19 | 46 | -28 | 28 | 8 | 15 | -24 |
| 71 | 39 | -12 | -44 | - 5 | -17 | 3 | 15 |
| 72 | 17 | -27 | - 6 | 5 | 2 | -31 | - 1 |
| 73 | - 4 | 28 | -18 | 27 | 4 | - 4 | -30 |
| 74 | 59 | 3 | -10 | -15 | 8 | 25 | 14 |
| 75 | 2 | -64 | -21 | -14 | -23 | -35 | 25 |
| 76 | 39 | - 9 | 6 | 11 | 23 | -19 | 2 |
| 77 | 58 | - 5 | 26 | 3 | 33 | -11 | 16 |
| 78 | -23 | 15 | -23 | 25 | 4 | 1 | 14 |
| 79 | - 1 | - 9 | -52 | - 2 | -27 | -11 | -21 |
| 80 | 28 | 0 | -43 | - 1 | -11 | 8 | -11 |
| 81 | 26 | 34 | 37 | 23 | 49 | 17 | 10 |
| 82 | -26 | 65 | 13 | 38 | 35 | 35 | 8 |
| 83 | 57 | -12 | 15 | - 7 | 30 | 1 | 16 |
| 84 | 35 | - 9 | 33 | 14 | 28 | -27 | - 8 |
| 85 | 19 | - 8 | -59 | -10 | -26 | - 8 | -42 |
| 86 | - 8 | - 6 | -74 | -15 | -36 | 7 | -16 |
| 87 | 33 | 11 | -12 | 8 | 22 | 19 | 16 |
| 88 | 41 | - 8 | 22 | 4 | 31 | -22 | -10 |

## Table G2 Continued

| Item | Factor<br>1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 89 | 37 | -31 | -27 | -17 | - 2 | -17 | -12 |
| 90 | 16 | 21 | 51 | 17 | 46 | 7 | 16 |
| 91 | 46 | -23 | - 3 | 4 | 7 | - 8 | 17 |
| 92 | 15 | - 0 | -17 | 22 | 24 | 3 | 27 |
| 93 | 8 | -20 | -11 | 17 | 3 | -20 | 16 |
| 94 | -11 | -36 | -23 | 6 | -20 | - 9 | 53 |
| 95 | 66 | -12 | 48 | - 4 | 32 | -17 | - 6 |
| 96 | 7 | -26 | 12 | 25 | 9 | -32 | 26 |
| 97 | 24 | -19 | - 6 | 10 | 2 | - 9 | 24 |
| 98 | 46 | - 7 | -19 | 5 | 3 | 13 | 13 |
| 99 | 61 | -31 | 11 | -19 | 4 | -26 | -21 |
| 100 | - 3 | -12 | 40 | 31 | 32 | -47 | -16 |
| 101 | 6 | 30 | 2 | 40 | 18 | 9 | - 5 |
| 102 | 30 | -14 | -20 | -12 | -19 | 26 | 34 |
| 103 | -44 | 41 | 5 | 46 | 26 | 7 | 10 |
| 104 | -19 | - 6 | -71 | - 8 | -41 | 17 | 12 |
| 105 | 10 | 7 | 8 | 40 | 24 | -24 | - 2 |
| 106 | 2 | 9 | 5 | 32 | 15 | -11 | - 4 |
| 107 | 15 | -17 | - 7 | - 2 | - 6 | 22 | 69 |
| 108 | 3 | 1 | 3 | 24 | 10 | -39 | -43 |
| 109 | -31 | - 2 | -35 | 12 | -24 | -11 | -17 |
| 110 | 17 | -46 | -59 | -34 | -54 | 11 | 30 |
| 111 | -18 | 31 | -11 | 10 | -15 | -28 | 12 |
| 112 | -34 | -14 | -53 | - 2 | -37 | 11 | 25 |
| 113 | -18 | 16 | -67 | 10 | -31 | 13 | -24 |
| 114 | -20 | 38 | -42 | 25 | - 7 | 4 | -38 |
| 115 | - 2 | 9 | -26 | 25 | 9 | - 3 | 13 |
| 116 | -17 | 29 | -37 | 33 | - 5 | 14 | - 7 |
| 117 | 13 | -23 | -69 | -17 | -46 | 18 | 8 |
| 118 | -17 | 30 | -58 | 10 | -19 | 14 | -32 |
| 119 | -18 | 3 | -49 | 7 | -11 | 11 | 18 |
| 120 | -24 | -14 | 16 | 37 | 12 | -64 | -24 |
| 121 | 50 | 2 | 12 | - 5 | 11 | 12 | 28 |
| 122 | 41 | 39 | 18 | 11 | 25 | 30 | 16 |
| 123 | 30 | -15 | -26 | - 5 | -10 | - 3 | 17 |
| 124 | 33 | 9 | -27 | - 2 | - 7 | - 8 | -42 |
| 125 | 44 | -39 | 7 | -20 | 4 | - 3 | 54 |
| 126 | - 5 | - 2 | -32 | 12 | -11 | -11 | 2 |
| 127 | 24 | -23 | 28 | 23 | 24 | -53 | 1 |
| 128 | 32 | 36 | -28 | 1 | -10 | 20 | -39 |
| 129 | 63 | 24 | 23 | - 1 | 28 | 19 | - 3 |
| 130 | 47 | 5 | -28 | - 9 | - 9 | 13 | - 9 |
| 131 | 46 | 4 | 28 | 4 | 37 | 7 | 43 |
| 132 | 1 | 29 | 27 | 27 | 30 | 6 | 13 |
| 133 | 34 | 25 | -17 | 2 | 6 | 23 | 2 |
| 134 | 15 | -32 | - 5 | -10 | 5 | 2 | 62 |
| 135 | -11 | 20 | 60 | 44 | 49 | -31 | - 0 |

### Table G2 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 136 | - 4 | 11 | 2 | 27 | 19 | 4 | 39 |
| 137 | -32 | 3 | - 2 | 27 | 7 | 4 | 32 |
| 138 | 28 | 4 | - 8 | 10 | 13 | -20 | -17 |
| 139 | 49 | 19 | 27 | - 0 | 32 | 5 | 4 |
| 140 | 46 | - 2 | 3 | -11 | 20 | 3 | 31 |
| 141 | -22 | -11 | -39 | 2 | -26 | 3 | 30 |
| 142 | 20 | -18 | -63 | -13 | -35 | - 6 | -22 |
| 143 | -18 | -13 | - 4 | 21 | 2 | - 1 | 57 |
| 144 | -32 | 27 | - 7 | 23 | 7 | 15 | 31 |
| 145 | 61 | 20 | 30 | - 1 | 29 | 27 | 23 |
| 146 | 69 | - 3 | 34 | - 2 | 23 | -14 | - 5 |
| 147 | 12 | -18 | -15 | 9 | - 6 | -16 | 26 |
| 148 | -26 | 22 | - 9 | 24 | 6 | 19 | 39 |
| 149 | 13 | 29 | 34 | 22 | 32 | 12 | 34 |
| 150 | -43 | - 1 | -38 | 8 | -24 | 8 | 20 |
| 151 | -11 | 5 | 24 | 28 | 17 | - 9 | 36 |
| 152 | 15 | 4 | - 7 | 35 | 3 | -21 | 8 |
| 153 | -11 | 16 | 22 | 34 | 25 | -14 | 9 |
| 154 | 7 | -15 | 37 | 33 | 26 | -62 | -16 |
| 155 | -41 | 8 | -11 | 16 | -13 | 28 | 63 |
| 156 | -25 | 19 | 14 | 41 | 19 | -25 | 4 |
| 157 | - 4 | 3 | 14 | 26 | 17 | -13 | 22 |
| 158 | 18 | - 7 | 17 | 24 | 8 | - 8 | 30 |
| 159 | -14 | 22 | 22 | 15 | 17 | 30 | 36 |
| 160 | -46 | 55 | - 1 | 39 | 18 | 16 | - 5 |
| 161 | 13 | 13 | -30 | 19 | - 7 | 3 | 8 |
| 162 | 11 | -43 | 16 | 3 | 2 | -40 | 26 |
| 163 | 6 | 10 | -30 | 21 | -15 | -19 | -40 |
| 164 | 56 | - 8 | 32 | 5 | 20 | -26 | -16 |
| 165 | - 8 | 34 | -16 | 30 | 11 | - 1 | 6 |
| 166 | - 4 | 26 | -10 | 26 | 10 | 0 | 7 |
| 167 | -12 | -43 | 19 | 20 | 2 | -68 | 16 |
| 168 | 8 | 56 | 4 | 21 | 24 | 30 | 9 |
| 169 | 34 | 30 | 21 | 10 | 19 | - 5 | -30 |
| 170 | 39 | -19 | 56 | 8 | 26 | -37 | 21 |
| 171 | - 4 | 21 | 31 | 27 | 24 | -18 | -16 |
| 172 | 45 | -17 | 30 | - 0 | 16 | -42 | -26 |
| 173 | 74 | 4 | 15 | - 9 | 14 | 1 | - 8 |
| 174 | 56 | 25 | -16 | - 4 | 4 | 18 | -14 |
| 175 | 31 | 4 | -13 | 12 | 12 | -17 | 2 |
| 176 | 46 | 10 | -13 | 2 | 0 | - 0 | -12 |
| 177 | 52 | -18 | 39 | - 2 | 23 | -20 | 17 |
| 178 | 69 | 11 | - 6 | -17 | 6 | 13 | -15 |
| 179 | 43 | - 7 | 16 | 6 | 23 | -34 | -10 |
| 180 | -20 | 73 | 13 | 40 | 32 | 21 | -14 |
| 181 | - 7 | -31 | -11 | - 4 | -12 | -16 | 56 |

Table G2 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 182 | 3 | -33 | -38 | -13 | -30 | - 10 | 42 |
| 183 | 26 | - 6 | 19 | 3 | 22 | -12 | 27 |
| 184 | 42 | 18 | - 0 | -10 | 14 | 33 | 27 |
| 185 | -32 | -10 | 30 | 30 | 23 | -36 | 40 |
| 186 | 26 | 23 | 20 | 13 | 27 | - 7 | - 6 |
| 187 | -32 | 45 | 10 | 36 | 24 | 8 | 22 |
| 188 | 33 | - 5 | -16 | -28 | -11 | 36 | 28 |
| 189 | 3 | -19 | -24 | -17 | -22 | 18 | 63 |
| 190 | 27 | -12 | 2 | - 8 | - 1 | 12 | 45 |
| 191 | 026 | -23 | -14 | 10 | - 9 | -28 | 46 |
| 192 | - 3 | - 1 | -28 | 6 | -22 | -14 | 1 |
| 193 | 30 | -19 | -22 | -10 | -13 | 3 | 34 |
| 194 | -22 | -19 | 27 | 33 | 13 | -60 | 13 |
| 195 | -46 | 38 | -38 | 23 | -13 | 8 | - 8 |
| 196 | 7 | -16 | -13 | 12 | -10 | -47 | - 4 |
| 197 | 0 | - 4 | 2 | 12 | 3 | -34 | -23 |
| 198 | 13 | 32 | 5 | 15 | 17 | 17 | 20 |
| 199 | -16 | - 9 | -26 | - 2 | -24 | 6 | 49 |
| 200 | - 5 | -16 | - 2 | 3 | - 6 | -24 | 43 |
| 201 | 30 | -11 | 25 | 1 | 12 | -39 | -21 |
| 202 | 54 | 12 | 39 | 1 | 33 | 7 | 13 |
| 203 | -16 | -10 | - 14 | 18 | - 4 | 38 | -14 |
| 204 | 13 | -17 | -13 | - 4 | -16 | -39 | -32 |
| 205 | -17 | -34 | -28 | -13 | -35 | - 5 | 61 |
| 206 | -25 | 4 | -11 | - 2 | -11 | 21 | 63 |
| 207 | 9 | 8 | 18 | 23 | 18 | -32 | 14 |
| 208 | 9 | -18 | -18 | - 7 | -19 | -44 | -27 |
| 209 | -20 | -16 | -30 | - 6 | 35 | -23 | 9 |
| 210 | 25 | - 0 | 20 | 6 | 16 | -32 | -40 |
| 211 | -25 | 8 | -14 | 18 | - 8 | -33 | - 8 |
| 212 | - 6 | 27 | - 0 | 20 | 9 | -13 | 16 |
| 213 | -11 | 22 | -10 | 19 | 6 | -17 | 1 |
| 214 | -37 | 65 | 7 | 38 | 23 | 14 | 8 |
| 215 | 3 | -34 | 1 | 6 | -12 | -72 | -33 |
| 216 | - 6 | 35 | -14 | 21 | 7 | -11 | -22 |
| 217 | -15 | 16 | - 4 | 22 | 11 | -23 | - 5 |
| 218 | -17 | - 1 | 7 | 14 | 3 | -32 | 19 |
| 219 | -26 | -38 | -17 | - 1 | -32 | -54 | -13 |
| 220 | 23 | - 3 | -46 | -15 | -28 | -11 | -38 |
| 221 | 35 | 3 | 1 | - 0 | 8 | 12 | 23 |
| 222 | -35 | 19 | 26 | 31 | 22 | -27 | 17 |
| 223 | 34 | 35 | 10 | 3 | 22 | 24 | 13 |
| 224 | -27 | 26 | 3 | 10 | 2 | 27 | 37 |
| 225 | 31 | 3 | -19 | - 4 | -10 | -18 | - 3 |
| 226 | 30 | - 1 | - 7 | 1 | 4 | -17 | 7 |
| 227 | -35 | 30 | 36 | 40 | 40 | -22 | - 8 |
| 228 | 21 | -32 | -43 | -28 | -37 | - 6 | 12 |
| 229 | - 1 | 13 | -21 | - 3 | -11 | 30 | 37 |

330

Table G2 Continued

| | Factor | | | | | | |
|---|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 230 | -64 | 22 | 4 | 28 | 5 | - 8 | 34 |
| 231 | -23 | 25 | -26 | 4 | -15 | 13 | 5 |
| 232 | -27 | 44 | 7 | 15 | 13 | 34 | 41 |
| 233 | - 2 | - 8 | - 3 | -15 | - 6 | 21 | 72 |
| 234 | 27 | -18 | - 9 | -21 | - 9 | 18 | 66 |
| 235 | 14 | 16 | 3 | 10 | 17 | - 3 | 24 |
| 236 | 20 | 6 | 10 | - 8 | 18 | 12 | 47 |
| 237 | -46 | 5 | 4 | 11 | - 1 | 2 | 55 |
| 238 | 19 | -17 | - 5 | -21 | - 7 | 22 | 68 |
| 239 | - 8 | 28 | 11 | 11 | 19 | 19 | 44 |
| 240 | 16 | - 2 | -63 | -24 | -40 | 8 | -18 |
| 241 | - 8 | - 9 | 33 | 18 | 19 | -58 | -11 |
| 242 | 26 | -14 | 39 | 9 | 23 | -46 | 6 |
| 243 | -17 | 6 | 2 | 22 | - 1 | -26 | 21 |
| 244 | 6 | -47 | -14 | -10 | -23 | -25 | 41 |
| 245 | -37 | 26 | 6 | 37 | 3 | -42 | -28 |
| 246 | - 1 | 16 | -16 | 8 | - 7 | 13 | 28 |
| 247 | 7 | - 3 | -36 | 4 | -22 | -27 | -28 |
| 248 | 15 | -56 | 14 | -18 | -13 | -25 | 51 |
| 249 | 7 | -44 | 28 | 4 | 4 | -70 | - 5 |
| 250 | -12 | -32 | 9 | 2 | - 5 | -41 | 31 |
| 251 | - 7 | 10 | 35 | 27 | 20 | -57 | -24 |
| 252 | 28 | 5 | 22 | 6 | 13 | -15 | - 7 |
| 253 | 7 | -24 | 28 | 5 | 7 | -34 | 34 |
| 254 | -36 | 51 | 13 | 46 | 20 | -18 | -16 |
| 255 | 50 | 1 | - 5 | -12 | - 1 | -14 | -44 |
| 256 | 8 | 42 | 19 | 24 | 26 | - 2 | 5 |
| 257 | - 2 | 56 | 17 | 23 | 15 | 14 | 1 |
| 258 | 8 | -20 | -20 | - 8 | -21 | -21 | 18 |
| 259 | 15 | -30 | 27 | 5 | 3 | 57 | -12 |
| 260 | - 7 | - 1 | 18 | 22 | 9 | -47 | 1 |
| 261 | -22 | 38 | 7 | 17 | 13 | 29 | 39 |
| 262 | -30 | -16 | -22 | - 2 | -20 | 2 | 54 |
| 263 | -13 | 59 | 13 | 30 | 24 | 4 | - 7 |
| 264 | 17 | 37 | 28 | 9 | 27 | 21 | 13 |
| 265 | 9 | -20 | 42 | 18 | 23 | -66 | -13 |
| 266 | 2 | -39 | 9 | 6 | - 9 | -68 | -21 |
| 267 | -10 | 24 | - 9 | 20 | 5 | -16 | 4 |
| 268 | 12 | 37 | 37 | 18 | 33 | 7 | 15 |
| 269 | 18 | 18 | 36 | 17 | 22 | -29 | -17 |
| 270 | -13 | 39 | - 2 | 10 | 5 | 41 | 31 |
| 271 | 11 | 42 | 8 | 20 | 20 | - 2 | 21 |
| 272 | 8 | 7 | -17 | 5 | - 9 | -16 | 7 |
| 273 | 30 | 15 | -11 | - 0 | - 0 | - 5 | - 7 |
| 274 | 23 | - 1 | -49 | -12 | -32 | - 7 | -36 |
| 275 | - 8 | 69 | 39 | 32 | 45 | 27 | 1 |
| 276 | 34 | 22 | -15 | - 6 | - 3 | 14 | - 7 |
| 277 | 16 | 27 | -10 | 6 | 1 | 1 | -17 |

Table G2 Continued

| | Factor | | | | | | |
|---|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 278 | - 4 | 28 | 7 | 18 | 16 | -25 | -18 |
| 279 | 4 | 46 | 49 | 28 | 42 | - 5 | -21 |
| 280 | 50 | 17 | 20 | -11 | 23 | 29 | 23 |
| 281 | 4 | 6 | 11 | 12 | 15 | -14 | 31 |
| 282 | -20 | 22 | -19 | 11 | - 4 | -17 | -24 |
| 283 | 6 | -32 | -29 | -19 | -25 | 2 | 49 |
| 284 | - 0 | -45 | -16 | - 1 | -27 | -60 | -24 |
| 285 | 27 | 14 | 7 | 2 | 14 | 5 | 26 |
| 286 | 13 | 6 | 11 | - 2 | 9 | 1 | 27 |
| 287 | -10 | 30 | -49 | 2 | -25 | 9 | -30 |
| 288 | 32 | - 7 | 47 | 4 | 30 | - 9 | 20 |
| 289 | 22 | -49 | 3 | -17 | -17 | -38 | 2 |
| 290 | 0 | - 0 | -15 | 6 | -12 | -45 | -66 |
| 291 | 35 | -14 | -11 | -18 | - 9 | - 9 | -19 |
| 292 | 8 | -41 | -33 | -16 | -37 | -38 | -27 |
| 293 | - 4 | -50 | 14 | 7 | - 5 | -73 | 1 |
| 294 | - 1 | -41 | 24 | 7 | 7 | -56 | 26 |
| 295 | 2 | -11 | - 7 | 10 | - 19 | -28 | 16 |
| 296 | - 4 | -25 | - 4 | 8 | -10 | -40 | 18 |
| 297 | -12 | -14 | - 4 | 12 | - 7 | -60 | -43 |
| 298 | -12 | -49 | 19 | 5 | - 5 | -65 | 15 |
| 299 | 1 | -27 | -20 | 2 | -25 | -46 | -10 |
| 300 | 62 | -16 | 25 | -17 | 16 | 7 | 20 |

## Table G3

Correlation of all FPS Item
Scores and Factor Scores from
Principal Component-Varimax
Analysis of Items 3, 6, 9, ---, 300

| | Factor | | | | | |
|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | 36 | 33 | 26 | -12 | - 1 | 24 |
| 2 | 34 | 23 | 34 | 10 | 25 | 27 |
| 3 | 33 | - 1 | 4 | -21 | -19 | 7 |
| 4 | 42 | 0 | -43 | -24 | 21 | 8 |
| 5 | 9 | 24 | 18 | -25 | -42 | 2 |
| 6 | 24 | -27 | -23 | 8 | -20 | - 0 |
| 7 | - 9 | 43 | -23 | 10 | -27 | -13 |
| 8 | 49 | -11 | -24 | -20 | 38 | 17 |
| 9 | 56 | 46 | 18 | -21 | 24 | 36 |
| 10 | 52 | 3 | -10 | -30 | 9 | 21 |
| 11 | 18 | 38 | 34 | - 2 | - 9 | 14 |
| 12 | - 1 | 8 | 25 | 34 | 8 | 16 |
| 13 | 44 | 7 | 15 | - 4 | 16 | 30 |
| 14 | - 7 | - 2 | 29 | - 9 | -48 | - 2 |
| 15 | -24 | 47 | 4 | 48 | 5 | - 7 |
| 16 | 8 | - 9 | 37 | 27 | - 8 | 17 |
| 17 | - 7 | -23 | 27 | 20 | -33 | 3 |
| 18 | 36 | 19 | -28 | 1 | - 2 | 10 |
| 19 | 36 | 46 | 19 | 3 | 19 | 25 |
| 20 | 30 | 16 | 14 | - 9 | -14 | 18 |
| 21 | 4 | -56 | 3 | 2 | -30 | 3 |
| 22 | 38 | -36 | -43 | -38 | - 7 | 2 |
| 23 | -14 | -17 | 29 | 16 | -34 | 3 |
| 24 | - 4 | -29 | 35 | 39 | - 4 | 11 |
| 25 | 37 | 41 | 40 | -10 | 18 | 35 |
| 26 | 32 | 54 | - 1 | -17 | 6 | 13 |
| 27 | 18 | - 2 | 6 | - 2 | -41 | 10 |
| 28 | - 2 | -32 | 41 | 36 | 1 | 14 |
| 29 | 10 | 28 | 40 | 21 | 5 | 22 |
| 30 | -16 | -63 | - 3 | 7 | -19 | -11 |
| 31 | -14 | 14 | 23 | 30 | -23 | 0 |
| 32 | 7 | 8 | -10 | 8 | -21 | - 3 |
| 33 | 2 | 19 | 4 | 35 | -13 | - 0 |
| 34 | -16 | 44 | -35 | 21 | -22 | -21 |
| 35 | -22 | -40 | 51 | 28 | -21 | 5 |
| 36 | -10 | 5 | - 2 | 44 | - 9 | - 6 |
| 37 | - 5 | 12 | 7 | 22 | -19 | - 4 |
| 38 | - 9 | 16 | 16 | - 2 | -26 | - 6 |
| 39 | -18 | - 5 | 65 | 33 | - 5 | 16 |
| 40 | - 0 | -28 | 16 | 53 | 32 | 13 |

**Table G3 Continued**

| | Factor | | | | | |
|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 |
| 41 | 35 | - 4 | 6 | 6 | - 5 | 19 |
| 42 | - 7 | 22 | 4 | - 0 | -49 | -13 |
| 43 | 30 | -10 | -50 | - 5 | 9 | 5 |
| 44 | 31 | 58 | -21 | -19 | 1 | 8 |
| 45 | 26 | -15 | 14 | 35 | 4 | 20 |
| 46 | 32 | - 8 | 13 | 22 | 3 | 20 |
| 47 | -27 | 18 | -26 | 18 | -52 | -24 |
| 48 | 42 | - 7 | 40 | 30 | 38 | 33 |
| 49 | 34 | 32 | -17 | - 3 | 31 | 14 |
| 50 | -10 | 62 | 5 | 6 | -22 | - 9 |
| 51 | -14 | 36 | - 9 | 39 | 17 | - 5 |
| 52 | 17 | 55 | -36 | - 9 | - 1 | - 9 |
| 53 | 56 | 44 | 4 | -22 | 12 | 29 |
| 54 | 67 | 15 | 7 | -25 | 27 | 35 |
| 55 | 34 | 10 | -11 | 0 | -10 | 7 |
| 56 | 46 | 10 | -15 | -20 | 8 | 12 |
| 57 | 15 | 61 | 4 | - 6 | -17 | - 1 |
| 58 | 58 | 29 | - 3 | -32 | 19 | 25 |
| 59 | 25 | 39 | -20 | - 8 | - 5 | 4 |
| 60 | 25 | - 7 | 19 | 59 | 51 | 27 |
| 61 | -14 | -20 | 10 | 7 | -52 | - 6 |
| 62 | 13 | -34 | 0 | -15 | -47 | 12 |
| 63 | 12 | 24 | 19 | 12 | -28 | 12 |
| 64 | 38 | 13 | 44 | -17 | 10 | 30 |
| 65 | -36 | 5 | 11 | 41 | -37 | - 9 |
| 66 | 37 | 35 | 6 | 13 | 8 | 28 |
| 67 | - 3 | -17 | 33 | 56 | 6 | 14 |
| 68 | 45 | 8 | 31 | -48 | 0 | 24 |
| 69 | - 3 | -32 | 39 | -16 | -48 | 10 |
| 70 | 22 | 18 | 40 | -16 | -22 | 20 |
| 71 | -14 | -27 | 3 | 18 | -49 | - 4 |
| 72 | 7 | -35 | -19 | 10 | -14 | 5 |
| 73 | 21 | - 4 | 16 | -19 | -30 | 11 |
| 74 | -25 | 12 | -14 | 35 | -34 | -13 |
| 75 | 2 | -63 | -11 | 37 | 13 | 4 |
| 76 | 10 | -10 | -35 | 10 | -26 | 0 |
| 77 | 1 | 10 | -43 | 22 | -23 | - 0 |
| 78 | 33 | - 1 | 38 | 15 | 4 | 36 |
| 79 | - 1 | -41 | 30 | 2 | -31 | 12 |
| 80 | - 9 | -17 | 14 | 13 | -39 | 3 |
| 81 | 15 | 56 | -29 | - 1 | - 6 | 0 |
| 82 | 32 | 62 | 27 | - 9 | 14 | 25 |
| 83 | -13 | 13 | -42 | 20 | -21 | -15 |
| 84 | 21 | 2 | -58 | -11 | -14 | -13 |
| 85 | -12 | -39 | 18 | - 9 | -60 | - 6 |
| 86 | -12 | -33 | 46 | 12 | -34 | 8 |
| 87 | 4 | 20 | - 6 | 28 | -27 | 1 |

### Table G3 Continued

| | Factor | | | | | |
|---|---|---|---|---|---|---|
| Item | 1 | 2 | 3 | 4 | 5 | 6 |
| 88 | 7 | 3 | -49 | -9 | -25 | -8 |
| 89 | -13 | -31 | -17 | 9 | -34 | -9 |
| 90 | 15 | 49 | -40 | -6 | 16 | -2 |
| 91 | -4 | -13 | -24 | 36 | -21 | -8 |
| 92 | 16 | 2 | 3 | 33 | -10 | 19 |
| 93 | 27 | -24 | -6 | 30 | 0 | 14 |
| 94 | 12 | -29 | 20 | 59 | 29 | 25 |
| 95 | -9 | -9 | -72 | -4 | -25 | -26 |
| 96 | 34 | -21 | -23 | 25 | 14 | 20 |
| 97 | 8 | -18 | -8 | 38 | -5 | 10 |
| 98 | -11 | -2 | -7 | 35 | -28 | -7 |
| 99 | -25 | -23 | -60 | -7 | -43 | -30 |
| 100 | 42 | -15 | -44 | -32 | 11 | 7 |
| 101 | 29 | 16 | 1 | -4 | -16 | -13 |
| 102 | -22 | 2 | 6 | 55 | -11 | -4 |
| 103 | 49 | 29 | 31 | -7 | 26 | 32 |
| 104 | -5 | -27 | 57 | 30 | -9 | 18 |
| 105 | 47 | -2 | -23 | -3 | -16 | 16 |
| 106 | 37 | 2 | -13 | -13 | -7 | 8 |
| 107 | -5 | 10 | 7 | 67 | 21 | 13 |
| 108 | 34 | -24 | -26 | 48 | -30 | 2 |
| 109 | 17 | -26 | 36 | -12 | -3 | 14 |
| 110 | -32 | -42 | 25 | 57 | -12 | -5 |
| 111 | 19 | -39 | 5 | 14 | 19 | 16 |
| 112 | 6 | -24 | 53 | 32 | 13 | 25 |
| 113 | 5 | -18 | 53 | 1 | -32 | 13 |
| 114 | 25 | -2 | 42 | -26 | -37 | 24 |
| 115 | 26 | -1 | 19 | 21 | -11 | 29 |
| 116 | 19 | 6 | 37 | 4 | -16 | 24 |
| 117 | -26 | -36 | 39 | 44 | -31 | -3 |
| 118 | 8 | -8 | 51 | -12 | -36 | 16 |
| 119 | 12 | -13 | 45 | 28 | -3 | 26 |
| 120 | 59 | -37 | -25 | -40 | 7 | 23 |
| 121 | -14 | 23 | -28 | 37 | -19 | -1 |
| 122 | -9 | 49 | -13 | 17 | -23 | 5 |
| 123 | -5 | -18 | 4 | 39 | -28 | 14 |
| 124 | -7 | -17 | -2 | -18 | -59 | -6 |
| 125 | -19 | -6 | -30 | 52 | 5 | -2 |
| 126 | 15 | -20 | 28 | 13 | -17 | 33 |
| 127 | 31 | -22 | -50 | -5 | -10 | 14 |
| 128 | -18 | 12 | 16 | -10 | -60 | -2 |
| 129 | -21 | 38 | -39 | 7 | -43 | -16 |
| 130 | -25 | -4 | 2 | 19 | -52 | -8 |
| 131 | -1 | 29 | -35 | 33 | -4 | 7 |
| 132 | 28 | 41 | -13 | -3 | 8 | 16 |
| 133 | -10 | 26 | 1 | 15 | -36 | 5 |
| 134 | -5 | -5 | -8 | 53 | 18 | 13 |
| 135 | 55 | 26 | -42 | -33 | 28 | 16 |

Table G3 Continued

| Item | Factor<br>1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 136 | 27 | 20 | 8 | 30 | 15 | 31 |
| 137 | 29 | 12 | 21 | 31 | 36 | 34 |
| 138 | 9 | - 5 | -19 | - 7 | 44 | 17 |
| 139 | - 7 | 37 | -42 | - 2 | -27 | - 4 |
| 140 | - 9 | 15 | -20 | 30 | -18 | 7 |
| 141 | 3 | -22 | 46 | 38 | 9 | 31 |
| 142 | -18 | -44 | 27 | 14 | -50 | 3 |
| 143 | 21 | 1 | 19 | 45 | 34 | 32 |
| 144 | 22 | 28 | 38 | 19 | 28 | 36 |
| 145 | -20 | 49 | -36 | 27 | -24 | -10 |
| 146 | -13 | 12 | -58 | 4 | -36 | -14 |
| 147 | 12 | -20 | - 2 | 40 | - 8 | 29 |
| 148 | 17 | 24 | 37 | 30 | 24 | 36 |
| 149 | 12 | 41 | -12 | 18 | 10 | 18 |
| 150 | 17 | -16 | 60 | 24 | 24 | 32 |
| 151 | 30 | 18 | - 9 | 12 | 26 | 24 |
| 152 | 22 | - 5 | - 6 | 11 | -20 | 27 |
| 153 | 47 | 17 | -14 | - 9 | 10 | 26 |
| 154 | 47 | -20 | -55 | -33 | - 2 | 14 |
| 155 | 17 | 21 | 43 | 46 | 48 | 33 |
| 156 | 52 | 9 | 0 | -20 | 12 | 42 |
| 157 | 31 | 11 | -12 | 6 | 12 | 24 |
| 158 | 10 | 5 | -21 | 26 | 6 | 10 |
| 159 | 9 | 50 | 15 | 36 | 44 | 21 |
| 160 | 37 | 36 | 41 | -21 | 15 | 34 |
| 161 | 8 | 3 | 15 | 21 | -28 | 24 |
| 162 | 12 | -29 | -37 | 21 | 15 | 15 |
| 163 | 13 | -22 | 13 | -20 | -45 | 11 |
| 164 | - 4 | 1 | -57 | -11 | -34 | -14 |
| 165 | 30 | 21 | 25 | 4 | -21 | 47 |
| 166 | 24 | 17 | 18 | 7 | -13 | 37 |
| 167 | 36 | -41 | -29 | 0 | 19 | 28 |
| 168 | 6 | 58 | 21 | 5 | -17 | 24 |
| 169 | - 3 | 24 | -29 | -30 | -41 | - 8 |
| 170 | 14 | 6 | -66 | 2 | 4 | 1 |
| 171 | 30 | 19 | -24 | -35 | - 2 | 11 |
| 172 | 2 | -15 | -57 | -24 | -35 | - 7 |
| 173 | -24 | 15 | -44 | 10 | -53 | -11 |
| 174 | -27 | 19 | - 6 | 12 | -67 | - 2 |
| 175 | 11 | - 7 | - 7 | 14 | -40 | 27 |
| 176 | -10 | - 0 | -10 | 6 | -47 | 3 |
| 177 | - 4 | 6 | -62 | 16 | -13 | - 4 |
| 178 | -36 | 15 | -25 | 11 | -63 | -13 |
| 179 | 4 | - 8 | -40 | - 6 | -35 | 8 |
| 180 | 32 | 60 | 27 | -30 | - 8 | 33 |
| 181 | 6 | -19 | 9 | 47 | 24 | 35 |
| 182 | - 8 | -27 | 23 | 48 | 0 | 30 |
| 183 | 9 | 13 | -32 | 20 | - 8 | 20 |

### Table G3 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 184 | -22 | 38 | - 8 | 36 | -23 | - 2 |
| 185 | 41 | 1 | -10 | 9 | 42 | 37 |
| 186 | 3 | 24 | -29 | -12 | -32 | 17 |
| 187 | 34 | 41 | 25 | 1 | 21 | 44 |
| 188 | -43 | 14 | - 2 | 50 | -29 | -13 |
| 189 | -22 | - 2 | 25 | 70 | 18 | 21 |
| 190 | -15 | 12 | -13 | 45 | - 0 | 9 |
| 191 | 15 | -20 | 22 | 33 | 24 | 42 |
| 192 | 3 | -20 | 27 | 10 | -20 | 30 |
| 193 | -21 | -11 | 6 | 50 | -18 | 13 |
| 194 | 41 | -22 | -20 | - 8 | 23 | 32 |
| 195 | 24 | 7 | 67 | -10 | - 1 | 42 |
| 196 | 14 | -35 | 1 | 3 | -24 | 35 |
| 197 | 19 | -25 | -10 | -23 | -22 | 27 |
| 198 | - 3 | 37 | 12 | 23 | -13 | 30 |
| 199 | - 7 | - 3 | 39 | 50 | 21 | 34 |
| 200 | 3 | -10 | 3 | 32 | 12 | 34 |
| 201 | 3 | -13 | -54 | -25 | -29 | - 1 |
| 202 | - 8 | 36 | -50 | 11 | -23 | - 7 |
| 203 | 33 | -25 | -17 | -29 | 1 | 25 |
| 204 | - 5 | -42 | -13 | -21 | -39 | 2 |
| 205 | - 7 | -23 | 30 | 61 | 28 | 32 |
| 206 | 3 | 13 | 33 | 45 | 34 | 31 |
| 207 | 26 | 5 | -23 | 1 | - 8 | 41 |
| 208 | 1 | -40 | -11 | -22 | -34 | 11 |
| 209 | 4 | -30 | 21 | 9 | 0 | 22 |
| 210 | 8 | -11 | -46 | -45 | -39 | -13 |
| 211 | 26 | -15 | 22 | -14 | - 3 | 38 |
| 212 | 21 | 15 | 13 | 3 | - 6 | 41 |
| 213 | 20 | 7 | 24 | - 2 | -13 | 51 |
| 214 | 33 | 52 | 41 | -13 | 10 | 50 |
| 215 | 18 | -53 | -25 | -30 | -21 | 13 |
| 216 | 18 | 10 | -25 | -20 | -32 | 37 |
| 217 | 21 | 2 | 17 | - 8 | - 5 | 40 |
| 218 | 21 | - 6 | 2 | 2 | 13 | 36 |
| 219 | 12 | -62 | 5 | -18 | 3 | 19 |
| 220 | -21 | -31 | 16 | -11 | -58 | 2 |
| 221 | - 6 | 2 | -11 | 27 | -26 | 28 |
| 222 | 37 | 15 | 5 | -13 | 28 | 52 |
| 223 | - 8 | 40 | - 8 | 13 | -27 | 7 |
| 224 | 6 | 36 | 33 | 36 | 32 | 34 |
| 225 | -12 | -11 | - 1 | 14 | -51 | 28 |
| 226 | - 6 | - 6 | - 9 | 18 | -36 | 25 |
| 227 | 44 | 35 | 0 | 38 | 12 | 41 |
| 228 | -33 | -44 | 14 | 40 | -30 | 5 |
| 229 | -13 | 18 | 32 | 41 | 3 | 18 |
| 230 | 34 | 15 | 42 | 6 | 44 | 51 |
| 231 | - 0 | 11 | 51 | 6 | 0 | 33 |

Table G3 Continued

Factor

| Item | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 232 | 5 | 51 | 36 | 22 | 23 | 35 |
| 233 | -14 | 17 | 19 | 59 | 29 | 27 |
| 234 | -27 | 8 | 3 | 71 | 6 | 20 |
| 235 | 7 | 22 | - 3 | 18 | -14 | 31 |
| 236 | -10 | 26 | - 7 | 36 | 0 | 21 |
| 237 | 22 | 15 | 34 | 28 | 54 | 52 |
| 238 | -25 | 11 | 4 | 67 | 16 | 17 |
| 239 | 3 | 36 | 14 | 25 | 15 | 29 |
| 240 | -38 | -30 | 38 | 16 | -57 | [illegible] |
| 241 | 27 | -15 | -35 | -33 | 2 | 26 |
| 242 | 9 | - 6 | -46 | - 6 | - 7 | 15 |
| 243 | 22 | - 3 | 12 | 11 | 10 | 52 |
| 244 | - 6 | -37 | - 1 | 47 | 13 | 17 |
| 245 | 39 | - 6 | 13 | -39 | - 2 | 37 |
| 246 | - 2 | 18 | 29 | 34 | - 0 | 36 |
| 247 | 2 | -34 | 15 | -10 | -42 | 21 |
| 248 | -11 | -24 | -28 | 42 | 22 | 7 |
| 249 | 18 | -44 | -51 | -16 | 5 | 13 |
| 250 | 15 | -24 | -10 | 16 | 22 | 30 |
| 251 | 30 | - 5 | -29 | -42 | - 9 | 27 |
| 252 | - 1 | 6 | -35 | -10 | -24 | 0 |
| 253 | 10 | - 9 | -33 | 18 | 14 | 25 |
| 254 | 39 | 22 | 16 | -35 | - 0 | 38 |
| 255 | -25 | -13 | -30 | -23 | -67 | -18 |
| 256 | 17 | 36 | - 5 | - 7 | -14 | 30 |
| 257 | 12 | 43 | 7 | -11 | -14 | 27 |
| 258 | - 6 | -27 | 4 | 26 | -12 | 28 |
| 259 | 13 | -31 | -48 | -21 | -10 | 4 |
| 260 | 24 | -11 | -18 | -11 | 2 | 23 |
| 261 | 11 | 51 | 35 | 27 | 28 | 36 |
| 262 | 9 | - 6 | 399 | 45 | 35 | 37 |
| 263 | 22 | 43 | 17 | -19 | - 8 | 34 |
| 264 | - 4 | 53 | -13 | 3 | - 8 | 10 |
| 265 | 30 | -21 | -55 | -30 | - 0 | 15 |
| 266 | 16 | -49 | -26 | -19 | -13 | 15 |
| 267 | 18 | 9 | 22 | - 1 | -12 | 52 |
| 268 | 11 | 50 | -14 | - 3 | 1 | 19 |
| 269 | 15 | 14 | -30 | -25 | -14 | 9 |
| 270 | - 0 | 52 | 39 | 25 | 16 | 22 |
| 271 | 7 | -24 | - 3 | -21 | -34 | 20 |
| 272 | 1 | - 9 | 13 | 14 | -21 | 34 |
| 273 | -16 | 3 | - 5 | 8 | -48 | 20 |
| 274 | -25 | -33 | 16 | - 0 | -64 | - 4 |
| 275 | 18 | 71 | 1 | -22 | 1 | 16 |
| 276 | -30 | 13 | 3 | 12 | -52 | 7 |
| 277 | - 5 | 7 | 2 | - 8 | -39 | 14 |
| 278 | 20 | 7 | - 0 | -25 | -17 | 29 |

Table G3 Continued

| Item | Factor<br>1 | <br>2 | <br>3 | <br>4 | <br>5 | <br>6 |
|---|---|---|---|---|---|---|
| 279 | 21 | 49 | -30 | -42 | - 7 | 5 |
| 280 | -25 | 40 | -25 | 24 | -19 | -11 |
| 281 | 11 | 13 | - 9 | 18 | 4 | 34 |
| 282 | 12 | - 5 | 23 | -28 | -19 | 34 |
| 283 | -19 | -20 | 20 | 36 | 8 | 22 |
| 284 | 8 | 063 | 015 | -12 | -16 | 9 |
| 285 | - 7 | 23 | -14 | 28 | -15 | 26 |
| 286 | - 5 | 19 | -11 | 21 | 1 | 21 |
| 287 | - 9 | - 4 | 44 | -10 | -37 | 19 |
| 288 | 3 | 23 | -58 | 7 | 6 | - 9 |
| 289 | - 8 | -41 | -36 | 9 | - 8 | - 8 |
| 290 | 8 | -28 | - 9 | -30 | -42 | 0 |
| 291 | -28 | -21 | -19 | - 1 | -43 | -13 |
| 292 | -18 | -60 | - 3 | - 5 | -29 | - 5 |
| 293 | 20 | -50 | -33 | - 7 | 8 | 19 |
| 294 | 21 | -30 | -35 | 11 | 23 | 29 |
| 295 | 4 | -19 | 4 | 19 | - 4 | 33 |
| 296 | 11 | -26 | - 4 | 15 | 6 | 30 |
| 297 | 17 | -45 | -15 | -45 | -21 | 17 |
| 298 | 20 | -42 | -31 | 1 | 24 | 23 |
| 299 | 5 | -42 | - 2 | - 1 | -16 | 19 |
| 300 | -30 | 18 | -56 | 27 | -25 | -22 |

## Table 6A

### Correlation Matrix by Rows Below Diagonal for FPS Item Scores 1, 4, 7, ---, 298

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | - 2 | | | | | | | | | |
| 3 | -10 | - 2 | | | | | | | | |
| 4 | 33 | 32 | -10 | | | | | | | |
| 5 | 30 | 15 | - 8 | 29 | | | | | | |
| 6 | 10 | -13 | 4 | - 0 | 22 | | | | | |
| 7 | 37 | 9 | 10 | 17 | 32 | 15 | | | | |
| 8 | - 7 | 39 | -11 | 30 | 12 | - 7 | -11 | | | |
| 9 | 40 | 1 | 2 | 21 | 30 | 11 | 44 | -18 | | |
| 10 | - 1 | -24 | -19 | -10 | 2 | 29 | - 3 | - 8 | 8 | |
| 11 | 10 | -21 | 17 | - 9 | 4 | 28 | 13 | -24 | 9 | 16 |
| 12 | - 3 | 4 | 49 | -14 | - 7 | - 3 | -13 | -12 | - 4 | -20 |
| | 28 | | | | | | | | | |
| 13 | 11 | -10 | 18 | -11 | 10 | 16 | 13 | -11 | - 0 | 5 |
| | 24 | 28 | | | | | | | | |
| 14 | -16 | - 3 | -16 | -11 | 3 | 19 | - 4 | - 7 | -10 | 38 |
| | 6 | - 9 | 7 | | | | | | | |
| 15 | - 6 | 37 | 9 | 21 | 14 | -10 | - 3 | 38 | -11 | -10 |
| | - 6 | 14 | - 3 | 10 | | | | | | |
| 16 | 18 | 4 | - 4 | 8 | 23 | 22 | 13 | 11 | 8 | 14 |
| | 9 | - 1 | 13 | 18 | 13 | | | | | |
| 17 | 12 | 26 | 5 | 20 | 25 | - 8 | 36 | 4 | 29 | -14 |
| | - 2 | 20 | 4 | 1 | 25 | 3 | | | | |
| 18 | 21 | 23 | 40 | 19 | 1 | -17 | 31 | 2 | 14 | -34 |
| | - 2 | 41 | 3 | -24 | 14 | - 2 | 31 | | | |
| 19 | 8 | 20 | 14 | 19 | 7 | 10 | 12 | 13 | 6 | 0 |
| | 7 | 20 | 7 | 7 | 20 | 14 | 13 | 20 | | |
| 20 | 40 | 32 | - 4 | 42 | 27 | -10 | 36 | 21 | 29 | -19 |
| | -17 | - 9 | - 6 | -18 | 13 | 14 | 33 | 34 | 20 | |
| 21 | 1 | -18 | 11 | - 8 | - 2 | 17 | -14 | 1 | -13 | 16 |
| | 18 | 6 | 22 | - 4 | -13 | 8 | -26 | -11 | 3 | -12 |
| 22 | 35 | - 7 | -18 | 20 | 25 | 20 | 29 | - 3 | 41 | 7 |
| | 2 | -26 | 4 | - 5 | -12 | 12 | 5 | - 6 | - 0 | 32 |
| | - 8 | | | | | | | | | |
| 23 | - 2 | -22 | -10 | -14 | 10 | 30 | 5 | -18 | - 1 | 24 |
| | 20 | - 5 | 17 | 38 | -14 | 22 | - 3 | -23 | 4 | -13 |
| | 19 | 2 | | | | | | | | |
| 24 | 30 | -16 | - 1 | 11 | 23 | 14 | 28 | -10 | 30 | 11 |
| | 16 | - 4 | 12 | -17 | -19 | 11 | 3 | 0 | 9 | 19 |
| | 23 | 35 | - 3 | | | | | | | |
| 25 | 27 | - 6 | 1 | 21 | 4 | 2 | 1 | 14 | 18 | 13 |
| | 5 | -16 | - 4 | -19 | - 1 | 10 | - 9 | 1 | 11 | 16 |
| | 22 | 20 | - 5 | 31 | | | | | | |

Table G4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 26 | -7 | 16 | 16 | 9 | -3 | 2 | -9 | 20 | -11 | -5 |
| | 7 | 18 | 4 | -6 | 32 | 7 | 4 | 19 | 15 | -0 |
| | 15 | -12 | 0 | -11 | 10 | | | | | |
| 27 | 2 | -18 | -18 | 1 | -4 | 21 | -18 | 6 | 4 | 35 |
| | 11 | -29 | -6 | 6 | -14 | 4 | -25 | -31 | -2 | -11 |
| | 26 | 16 | 12 | 19 | 27 | 4 | | | | |
| 28 | 38 | -7 | 12 | 14 | 21 | 5 | 42 | -23 | 49 | -9 |
| | 11 | 11 | 5 | -13 | -10 | 4 | 26 | 26 | 14 | 36 |
| | -12 | 36 | -7 | 37 | 11 | -10 | -14 | | | |
| 29 | 1 | -27 | -10 | -9 | -5 | 17 | -24 | 7 | -16 | 22 |
| | 20 | -11 | 14 | -14 | -13 | 3 | -31 | -29 | 6 | -20 |
| | 43 | 0 | 11 | 25 | 28 | 12 | 45 | -19 | | |
| 30 | -8 | 18 | 17 | 5 | -1 | -16 | -7 | 24 | -20 | -20 |
| | -3 | 27 | 4 | -11 | 32 | -5 | 17 | 19 | 18 | 6 |
| | 4 | -22 | -14 | -7 | -1 | 22 | -8 | -3 | 9 | |
| 31 | -12 | 2 | 14 | -8 | -6 | 2 | -13 | 8 | -25 | 6 |
| | 11 | 22 | 12 | 5 | 26 | 18 | -4 | 9 | 7 | -13 |
| | 13 | -26 | 13 | -16 | 1 | 29 | 4 | -23 | 13 | 17 |
| 32 | -6 | -5 | -20 | -7 | 9 | 20 | -2 | -8 | -4 | 35 |
| | 6 | -16 | -1 | 45 | 6 | 29 | -1 | -20 | -3 | -12 |
| | -6 | -1 | 44 | -13 | -6 | 8 | 12 | -16 | -5 | -15 |
| | 24 | | | | | | | | | |
| 33 | -6 | 2 | 3 | 0 | -8 | 8 | -9 | 8 | -13 | 17 |
| | 0 | 3 | -1 | 19 | 8 | 16 | -4 | 5 | 6 | -1 |
| | 8 | -9 | 23 | -14 | 7 | 21 | 13 | -19 | -1 | 2 |
| | 31 | 38 | | | | | | | | |
| 34 | 4 | 37 | -5 | 29 | 14 | -15 | 3 | 47 | -3 | -14 |
| | -26 | -4 | -14 | -2 | 43 | 12 | 22 | 15 | 14 | 28 |
| | -18 | 1 | -19 | -15 | -2 | 17 | -14 | -8 | -12 | 24 |
| | 1 | -6 | 9 | | | | | | | |
| 35 | 35 | 12 | -6 | 25 | 36 | 14 | 37 | -4 | 43 | 2 |
| | 9 | -11 | -0 | -3 | 9 | 18 | 26 | 12 | 14 | 38 |
| | -15 | 40 | 5 | 28 | 16 | -6 | -10 | 42 | -17 | -15 |
| | -8 | 11 | -7 | 9 | | | | | | |
| 36 | 11 | 18 | 1 | 25 | 7 | -2 | 6 | 14 | 1 | -3 |
| | -4 | -5 | -1 | -3 | 10 | 12 | 5 | 14 | 22 | 25 |
| | 7 | 5 | 1 | 3 | 14 | 16 | 2 | 9 | 3 | 14 |
| | 6 | 1 | 15 | 12 | 16 | | | | | |
| 37 | 12 | -13 | -24 | 7 | 15 | 11 | -1 | 5 | 9 | 15 |
| | 5 | -36 | -4 | -0 | -4 | 17 | -11 | -28 | -7 | 6 |
| | 7 | 27 | 3 | 24 | 22 | -7 | 27 | -3 | 31 | -15 |
| | -1 | 11 | -1 | -2 | 21 | 5 | | | | |
| 38 | -0 | -23 | -28 | -14 | 8 | 25 | 6 | -21 | 11 | 40 |
| | 11 | -27 | 3 | 36 | -21 | 12 | -14 | -39 | -6 | -12 |
| | 12 | 26 | 39 | 18 | 5 | -20 | 25 | 1 | 15 | -30 |
| | -8 | 38 | 10 | -22 | 14 | -1 | 26 | | | |

Table G4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 10 | - 9 | 1 | - 2 | 21 | 27 | 17 | - 2 | 14 | 12 |
| | 13 | - 2 | 15 | 8 | 1 | 18 | 3 | - 9 | 12 | 7 |
| | 18 | 20 | 26 | 15 | 4 | 6 | 10 | 10 | 14 | 3 |
| | 8 | 20 | 9 | 3 | 18 | 7 | 7 | 23 | | |
| 40 | 17 | -27 | -11 | - 1 | 9 | 27 | 5 | - 9 | 18 | 24 |
| | 16 | -23 | 12 | - 9 | -31 | 5 | -21 | -24 | 2 | 1 |
| | 41 | 33 | 14 | 45 | 31 | -13 | 36 | 15 | 45 | -17 |
| | -18 | -14 | -11 | -22 | 16 | 7 | 31 | 32 | 21 | |
| 41 | - 6 | - 2 | 28 | - 7 | -14 | - 5 | 9 | -11 | -16 | - 2 |
| | 8 | 34 | 13 | 4 | 2 | 2 | 1 | 29 | 0 | -13 |
| | 3 | -23 | 10 | -15 | - 5 | 21 | -11 | - 4 | - 9 | 19 |
| | 26 | 9 | 20 | - 9 | -15 | 6 | -27 | -17 | 2 | -16 |
| 42 | 0 | - 9 | 12 | 2 | -11 | 7 | -16 | 12 | - 9 | 1 |
| | 13 | 5 | 5 | -19 | - 6 | - 6 | -16 | - 1 | 13 | - 9 |
| | 33 | - 5 | -10 | 17 | 22 | 16 | 31 | -10 | 46 | 13 |
| | 10 | -24 | 1 | - 4 | -15 | 11 | 13 | - 3 | 4 | 32 |
| | - 1 | | | | | | | | | |
| 43 | -11 | 30 | 0 | 16 | 1 | -10 | - 9 | 43 | -17 | - 6 |
| | -18 | 4 | -10 | 6 | 46 | 7 | 10 | 8 | 17 | 14 |
| | 1 | -15 | - 9 | -20 | - 0 | 32 | - 2 | -20 | 2 | 35 |
| | 19 | 6 | 25 | 38 | -11 | 21 | - 5 | -21 | 6 | -20 |
| | 16 | 6 | | | | | | | | |
| 44 | - 5 | -15 | 20 | -12 | -11 | 10 | - 9 | -11 | -14 | 10 |
| | 25 | 18 | 17 | - 8 | -14 | 5 | -20 | 2 | 5 | -24 |
| | 32 | -13 | 7 | 11 | 20 | 12 | 19 | -12 | 31 | 13 |
| | 22 | - 3 | 13 | -22 | -18 | 1 | - 4 | 2 | 10 | 17 |
| | 31 | 36 | - 1 | | | | | | | |
| 45 | 5 | -11 | 24 | - 9 | - 3 | 13 | 10 | -19 | 4 | - 2 |
| | 26 | 28 | 23 | -14 | -11 | - 5 | - 6 | 13 | 7 | -13 |
| | 26 | - 5 | 10 | 20 | 6 | 8 | 5 | 15 | 20 | 12 |
| | 11 | - 9 | - 0 | -23 | - 3 | 1 | - 9 | 0 | 13 | 17 |
| | 25 | 24 | - 5 | 31 | | | | | | |
| 46 | 14 | 5 | - 1 | 9 | 19 | 10 | 22 | -11 | 13 | 2 |
| | 11 | 10 | 8 | 16 | 5 | 18 | 21 | 8 | 13 | 15 |
| | - 4 | 10 | 20 | 11 | - 2 | 5 | -16 | 20 | -12 | 4 |
| | 8 | 21 | 8 | - 7 | 22 | 7 | - 2 | 12 | 20 | - 5 |
| | 17 | -15 | 9 | 0 | 9 | | | | | |
| 47 | - 5 | 8 | 33 | - 2 | - 9 | -18 | 5 | - 2 | - 8 | -29 |
| | 11 | 44 | 8 | -15 | 14 | -15 | 16 | 35 | 10 | - 0 |
| | 4 | -19 | -17 | - 1 | - 7 | 14 | -19 | 9 | - 3 | 32 |
| | 12 | -28 | - 8 | 2 | -11 | 5 | -23 | -23 | - 5 | - 9 |
| | 29 | 16 | 15 | 14 | 31 | 6 | | | | |
| 48 | - 7 | -26 | -10 | -11 | - 4 | 27 | -25 | 4 | -15 | 26 |
| | 23 | -15 | 9 | 8 | -16 | 7 | -34 | -32 | - 1 | -26 |
| | 42 | - 1 | 26 | 14 | 20 | 8 | 46 | -26 | 55 | 0 |
| | 19 | 10 | 14 | -16 | -15 | 0 | 22 | 24 | 20 | 36 |
| | - 7 | 41 | - 2 | 37 | 16 | -13 | - 8 | | | |

## Table G4 Continued

### Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 49 | -6 | -0 | 47 | -16 | -16 | -9 | 9 | -19 | -11 | -27 |
| | 17 | 53 | 15 | -16 | 3 | -5 | 9 | 45 | 7 | -6 |
| | 7 | -28 | -8 | -8 | -9 | 21 | -26 | 9 | -17 | 19 |
| | 25 | -8 | 10 | -14 | -13 | -4 | -32 | -30 | -2 | -22 |
| | 45 | 3 | 8 | 24 | 32 | 16 | 47 | -15 | | |
| 50 | 22 | -7 | -5 | 2 | 17 | 22 | 26 | -23 | 31 | 18 |
| | 10 | -8 | 4 | 18 | -10 | 19 | 10 | -1 | 2 | 9 |
| | -11 | 25 | 18 | 15 | -1 | -15 | -1 | 27 | -18 | -19 |
| | -4 | 25 | 8 | -13 | 26 | -5 | 9 | 22 | 17 | 7 |
| | -2 | -22 | -13 | -8 | -1 | 23 | -12 | -2 | 4 | |
| 51 | 10 | 23 | -2 | 15 | 12 | -8 | 15 | 0 | 8 | -5 |
| | -8 | -0 | -6 | 12 | 13 | 7 | 22 | 15 | 13 | 15 |
| | -20 | 7 | 7 | -5 | -11 | 5 | -15 | 10 | -24 | 0 |
| | 1 | 17 | 5 | 4 | 15 | 22 | -9 | 1 | 1 | -15 |
| | 8 | -20 | 16 | -18 | 1 | 30 | 11 | -25 | 12 | 14 |
| 52 | -5 | 46 | -5 | 33 | 10 | -15 | -8 | 52 | -15 | -23 |
| | -26 | -6 | -18 | -7 | 44 | 1 | 16 | 10 | 19 | 25 |
| | -7 | -7 | -22 | -13 | 6 | 24 | -8 | -14 | -2 | 31 |
| | 7 | -3 | 8 | 48 | -2 | 28 | -4 | -23 | -0 | -16 |
| | -3 | 8 | 53 | -15 | -5 | 5 | 17 | -10 | -3 | -19 |
| | 23 | | | | | | | | | |
| 53 | 1 | 17 | 3 | 7 | 10 | -1 | 9 | 2 | 3 | -3 |
| | -8 | 5 | -7 | 12 | 14 | 1 | 17 | 6 | 16 | 14 |
| | -6 | 5 | 4 | 1 | -10 | 5 | -6 | 15 | -15 | 13 |
| | -6 | 8 | 4 | 11 | 10 | 22 | -7 | 7 | 11 | 1 |
| | 3 | -5 | 17 | -11 | 4 | 16 | 18 | -13 | 3 | 7 |
| | 29 | 30 | | | | | | | | |
| 54 | 37 | -2 | -4 | 20 | 25 | 14 | 37 | -14 | 48 | -1 |
| | 1 | -16 | -0 | -10 | -16 | 6 | 12 | 4 | 6 | 39 |
| | -9 | 47 | -3 | 36 | 11 | -20 | 2 | 51 | -8 | -18 |
| | -31 | -14 | -17 | 1 | 43 | 3 | 17 | 12 | 14 | 30 |
| | -21 | -8 | -19 | -20 | 2 | 13 | -10 | -15 | -14 | 27 |
| | 9 | -11 | 14 | | | | | | | |
| 55 | 13 | -3 | -3 | 11 | 4 | 10 | -8 | 18 | -6 | 3 |
| | 2 | -17 | 5 | -22 | -12 | 12 | -25 | -8 | 7 | 7 |
| | 32 | 8 | -1 | 27 | 32 | 6 | 29 | -6 | 43 | 3 |
| | 6 | -5 | 6 | -4 | -3 | 13 | 23 | 6 | 11 | 35 |
| | -8 | 35 | 4 | 21 | 14 | -5 | -5 | 40 | -8 | -7 |
| | -4 | 14 | -0 | 8 | | | | | | |
| 56 | 16 | -5 | 6 | 8 | 16 | 17 | 12 | -5 | 14 | 5 |
| | 3 | 1 | 6 | 3 | -9 | 10 | 4 | -1 | 8 | 11 |
| | 11 | 20 | 10 | 17 | 13 | -4 | 3 | 21 | 6 | 4 |
| | -8 | 4 | 1 | -2 | 18 | 7 | 2 | 15 | 24 | 23 |
| | 7 | 4 | 8 | 6 | 14 | 12 | 10 | 9 | 2 | 16 |
| | 7 | 4 | 20 | 18 | 19 | | | | | |

## Table G4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57 | 5 | 10 | 22 | 7 | -7 | -17 | -1 | 5 | -2 | -24 |
| | 2 | 26 | 7 | -38 | 9 | -12 | 4 | 32 | 1 | 5 |
| | 13 | -6 | -28 | 13 | 18 | 10 | -3 | 7 | 8 | 21 |
| | 8 | -37 | -7 | 4 | -7 | 7 | -4 | -30 | -9 | 2 |
| | 11 | 27 | 7 | 20 | 22 | -13 | 37 | -2 | 30 | -20 |
| | -5 | 14 | -0 | -2 | 22 | 2 | | | | |
| 58 | -17 | 23 | 9 | 9 | -8 | -18 | -22 | 38 | -29 | -20 |
| | -11 | 16 | -6 | -19 | 30 | -9 | 5 | 17 | 7 | -2 |
| | 6 | -25 | -25 | -16 | 2 | 24 | 3 | -27 | 13 | 36 |
| | 17 | -20 | 4 | 30 | -27 | 11 | -10 | -35 | -8 | -18 |
| | 15 | 29 | 40 | 16 | 8 | -17 | 30 | 8 | 18 | -35 |
| | 1 | 43 | 5 | -28 | 15 | -1 | 40 | | | |
| 59 | 3 | -5 | 12 | 2 | 4 | 11 | -9 | 10 | -1 | 13 |
| | 14 | 9 | 1 | 0 | 11 | 12 | -4 | -2 | 14 | -5 |
| | 20 | -7 | 7 | 7 | 19 | 28 | 24 | -7 | 25 | 9 |
| | 22 | 7 | 15 | 3 | -1 | 10 | 2 | 3 | 18 | 13 |
| | 8 | 24 | 23 | 21 | 15 | 5 | 14 | 27 | 10 | 1 |
| | 0 | 15 | 8 | -6 | 17 | 17 | 13 | 20 | | |
| 60 | -8 | -19 | 34 | -21 | -27 | -4 | -11 | -9 | -21 | -9 |
| | 18 | 39 | 20 | -20 | -7 | -10 | -15 | 17 | 0 | -23 |
| | 28 | -26 | -5 | 3 | 8 | 18 | 4 | -9 | 27 | 24 |
| | 23 | -20 | 8 | -13 | -32 | -3 | -21 | -20 | -2 | 3 |
| | 37 | 31 | 7 | 43 | 34 | -14 | 35 | 22 | 45 | -16 |
| | -16 | -8 | -9 | -22 | 14 | 10 | 35 | 35 | 30 | |
| 61 | -10 | 2 | -16 | -6 | 3 | 11 | -4 | -8 | -6 | 28 |
| | 0 | -10 | -6 | 49 | 4 | 13 | -2 | -19 | -5 | -12 |
| | -8 | -6 | 26 | -13 | -15 | -1 | 4 | -11 | -14 | -8 |
| | 10 | 45 | 26 | -3 | -5 | -0 | -0 | 32 | 10 | -8 |
| | 10 | -19 | 11 | -6 | -4 | 23 | -10 | 6 | -8 | 21 |
| | 17 | 0 | 16 | -9 | -15 | 7 | -30 | -9 | 9 | -12 |
| 62 | -1 | -18 | 30 | -21 | -15 | 3 | 4 | -29 | -4 | -5 |
| | 22 | 41 | 23 | -3 | 0 | -1 | 6 | 20 | 3 | -16 |
| | 7 | -12 | 16 | -0 | -10 | 13 | -11 | 12 | -2 | 14 |
| | 19 | -5 | 3 | -22 | -5 | -2 | -22 | -5 | 8 | -4 |
| | 32 | 2 | -7 | 18 | 30 | 11 | 36 | -1 | 41 | 7 |
| | 3 | -20 | 4 | -7 | -8 | 13 | 15 | 1 | 17 | 36 |
| | -3 | | | | | | | | | |
| 63 | 26 | 2 | -2 | 15 | 21 | 5 | 33 | -16 | 45 | -4 |
| | 6 | -1 | -0 | 3 | -3 | 9 | 24 | 13 | 12 | 27 |
| | -18 | 29 | 1 | 20 | 3 | -9 | -9 | 49 | -23 | -10 |
| | -21 | 3 | -15 | -3 | 37 | 7 | 1 | 11 | 10 | 9 |
| | -2 | -16 | -9 | -15 | 4 | 26 | 2 | -23 | 1 | 30 |
| | 16 | -8 | 15 | 39 | -11 | 24 | 1 | -24 | -3 | -17 |
| | 4 | 7 | | | | | | | | |

**Table G4 Continued**

**Factor**

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 64 | -13 | - 5 | 12 | -18 | -11 | 5 | - 3 | -17 | -16 | 2 |
| | 12 | 22 | 5 | 22 | 4 | - 3 | - 2 | 8 | - 2 | -18 |
| | 1 | -18 | 17 | -18 | -20 | 10 | -10 | - 6 | -11 | 9 |
| | 16 | 21 | 13 | -13 | -15 | 3 | -18 | 2 | 7 | -18 |
| | 32 | -13 | 5 | 5 | 13 | 16 | 24 | - 3 | 26 | 13 |
| | 17 | - 5 | 13 | -15 | - 9 | 10 | - 3 | 4 | 8 | 14 |
| | 30 | 31 | - 2 | | | | | | | |
| 65 | -13 | -22 | 6 | -16 | - 9 | 18 | - 8 | -14 | -16 | 22 |
| | 19 | 8 | 10 | 20 | - 2 | 8 | -11 | -11 | - 4 | -21 |
| | 10 | -11 | 28 | -12 | - 7 | 8 | 11 | -17 | 8 | 1 |
| | 26 | 29 | 25 | -19 | -18 | - 7 | - 5 | 16 | 15 | - 5 |
| | 26 | 1 | 7 | 21 | 10 | 7 | 1 | 23 | 17 | 15 |
| | 2 | -15 | - 0 | -18 | - 1 | 11 | - 9 | 2 | 17 | 26 |
| | 28 | 13 | -10 | 30 | | | | | | |
| 66 | - 5 | 5 | -11 | 6 | 1 | 9 | -13 | 25 | - 9 | 12 |
| | 1 | -21 | -10 | 9 | 10 | 16 | - 8 | -15 | 5 | - 4 |
| | 7 | - 6 | 7 | - 1 | 13 | 16 | 29 | -21 | 21 | 4 |
| | 9 | 17 | 17 | 5 | - 8 | 7 | 12 | 7 | 9 | 13 |
| | 4 | 18 | 26 | 17 | - 2 | 4 | - 6 | 27 | - 8 | - 4 |
| | 3 | 22 | 3 | - 8 | 25 | 6 | 1 | 21 | 25 | 9 |
| | 20 | -13 | - 1 | 3 | 18 | | | | | |
| 67 | - 2 | -15 | -13 | -11 | 1 | 19 | 5 | -24 | 6 | 23 |
| | 16 | -12 | 1 | 30 | - 9 | 14 | - 5 | -15 | -14 | -15 |
| | - 5 | 7 | 32 | 0 | -11 | -12 | 6 | - 2 | - 8 | -22 |
| | 7 | 41 | 15 | -21 | 14 | -15 | 11 | 32 | 14 | 1 |
| | 7 | -14 | -14 | 3 | - 1 | 18 | -19 | 13 | 0 | 37 |
| | 7 | -25 | - 3 | 5 | - 8 | 3 | -22 | -29 | 1 | - 9 |
| | 34 | 9 | 12 | 19 | 28 | 14 | | | | |
| 68 | - 5 | 15 | 35 | 0 | -15 | -17 | - 0 | 1 | -13 | -26 |
| | 6 | 43 | 11 | -14 | 20 | - 7 | 10 | 35 | 10 | - 1 |
| | 4 | -29 | -16 | -16 | - 7 | 25 | -26 | 2 | -14 | 26 |
| | 22 | -13 | 11 | 8 | -14 | 8 | -32 | -36 | - 3 | -25 |
| | 37 | 1 | 16 | 11 | 21 | 7 | 43 | -19 | 51 | - 8 |
| | 13 | 13 | 11 | -18 | - 8 | 3 | 25 | 27 | 14 | 38 |
| | - 7 | 38 | - 0 | 32 | 13 | - 7 | -12 | | | |
| 69 | -17 | -11 | -23 | -16 | 1 | 18 | - 6 | -22 | - 4 | 33 |
| | 6 | -17 | 3 | 47 | - 7 | 14 | - 5 | -29 | -11 | -24 |
| | - 5 | - 5 | 42 | -13 | -17 | - 4 | 9 | -12 | - 9 | -23 |
| | 11 | 55 | 18 | -24 | - 1 | - 7 | 1 | 40 | 13 | - 8 |
| | 6 | -21 | - 7 | - 3 | - 2 | 19 | -20 | 7 | -11 | 24 |
| | 17 | -18 | 10 | -12 | -13 | 4 | -33 | -27 | 1 | -19 |
| | 47 | 4 | 10 | 26 | 30 | 17 | 51 | -13 | | |

## Table G4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 | -11 | 8 | -9 | 11 | -6 | -4 | -26 | 25 | -19 | 6 |
| | -5 | -16 | -3 | -6 | 9 | -7 | -18 | -21 | -4 | -10 |
| | 19 | -9 | -10 | 2 | 13 | 13 | 22 | -29 | 32 | 12 |
| | 3 | -10 | 1 | 9 | -17 | 9 | 11 | -5 | -1 | 17 |
| | -7 | 30 | 17 | 12 | 2 | -16 | 2 | 27 | -18 | -23 |
| | -9 | 24 | 0 | -8 | 35 | -1 | 14 | 27 | 16 | 6 |
| | -3 | -12 | -16 | -5 | -7 | 29 | -12 | -4 | 5 | |
| 71 | 5 | 6 | -20 | 12 | 18 | 2 | -1 | 15 | 11 | 8 |
| | -5 | -24 | -7 | 2 | 1 | 2 | 0 | -17 | 4 | 9 |
| | 3 | 22 | -1 | 18 | 11 | -6 | 13 | 2 | 10 | -8 |
| | -8 | 2 | -6 | 3 | 14 | 6 | 19 | 19 | 16 | 21 |
| | -16 | 6 | 1 | 1 | -0 | 4 | -11 | 11 | -28 | 6 |
| | 3 | 12 | 6 | 11 | 27 | 22 | 2 | 4 | 6 | -10 |
| | 9 | -15 | 17 | -7 | -3 | 26 | 10 | -20 | 11 | 18 |
| 72 | 38 | -2 | 5 | 17 | 30 | 8 | 37 | -20 | 51 | -4 |
| | 9 | -5 | 6 | -16 | -13 | 7 | 19 | 12 | 3 | 32 |
| | -12 | 42 | -6 | 40 | 12 | -20 | -9 | 53 | -14 | -14 |
| | -28 | -13 | -24 | -9 | 48 | 1 | 10 | 10 | 14 | 23 |
| | -7 | -12 | -23 | -11 | 11 | 16 | 4 | -17 | -1 | 33 |
| | 10 | -15 | 4 | 50 | -2 | 29 | 10 | -24 | -1 | -10 |
| | -4 | 5 | 52 | -10 | -7 | -4 | 15 | -7 | -4 | -17 |
| | 28 | | | | | | | | | |
| 73 | 15 | -1 | -7 | 17 | 19 | 12 | 12 | 6 | 16 | 1 |
| | 1 | -10 | -2 | 2 | 6 | 10 | 5 | -3 | 7 | 14 |
| | -5 | 18 | -3 | 14 | 3 | -7 | 9 | 9 | 1 | 2 |
| | -12 | 2 | -1 | 12 | 20 | 1 | 11 | 0 | 9 | 10 |
| | -3 | 2 | 5 | 2 | -8 | 4 | -7 | 9 | -10 | 18 |
| | -6 | 4 | 0 | 18 | 9 | 19 | -1 | 3 | 12 | 1 |
| | 3 | -3 | 21 | -10 | 7 | 19 | 15 | -14 | -1 | 8 |
| | 22 | 35 | | | | | | | | |
| 74 | -7 | -23 | -3 | -15 | -12 | 12 | -20 | 3 | -12 | 14 |
| | 12 | -6 | 9 | -13 | -17 | -3 | -32 | -23 | -2 | -23 |
| | 36 | -2 | 2 | 22 | 23 | 7 | 37 | -19 | 53 | 9 |
| | 9 | -10 | 1 | -12 | -24 | -5 | 13 | 8 | 9 | 35 |
| | -6 | 42 | -3 | 32 | 17 | -14 | 1 | 46 | -8 | -14 |
| | -25 | -7 | -11 | -6 | 42 | 3 | 19 | 13 | 25 | 30 |
| | -17 | 1 | -14 | -9 | 5 | 23 | -10 | -5 | -4 | 38 |
| | 13 | -11 | 10 | | | | | | | |
| 75 | 6 | -5 | 30 | -10 | -9 | -0 | 6 | -17 | 6 | -6 |
| | 12 | 33 | 15 | -17 | -7 | -6 | 5 | 24 | 8 | 2 |
| | 7 | -7 | -4 | 7 | 7 | 7 | -10 | 20 | -5 | 13 |
| | 4 | -14 | 4 | -17 | -1 | 5 | -22 | -13 | 5 | 3 |
| | 29 | 3 | -5 | 20 | 29 | 6 | 29 | -6 | 37 | -0 |
| | 10 | -9 | 6 | -0 | 1 | 18 | 22 | 9 | 15 | 33 |
| | -8 | 33 | 8 | 23 | 18 | -4 | -1 | 42 | -7 | -11 |
| | -3 | 21 | 3 | 7 | | | | | | |

## Table G4 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 76 | - 5 | - 6 | 9 | - 8 | - 5 | 4 | - 9 | 9 | - 6 | 10 |
| | 11 | 13 | 5 | 3 | 2 | 5 | - 7 | 1 | 3 | - 7 |
| | 12 | - 9 | 9 | - 2 | 4 | 17 | 17 | -10 | 14 | 15 |
| | 13 | 5 | 17 | - 1 | -13 | 4 | - 9 | - 3 | 12 | 4 |
| | 16 | 18 | 17 | 18 | 15 | - 2 | 11 | 21 | 14 | - 2 |
| | - 4 | 7 | 3 | - 7 | 10 | 9 | 11 | 23 | 27 | 22 |
| | 14 | 13 | - 3 | 15 | 23 | 22 | 7 | 16 | 8 | 17 |
| | 2 | - 4 | 14 | 19 | 16 | | | | | |
| 77 | 2 | -22 | 0 | -18 | 1 | 12 | 12 | -35 | 12 | 17 |
| | 17 | 7 | 8 | 16 | -22 | 8 | - 1 | - 5 | - 5 | -13 |
| | 2 | 5 | 25 | 6 | - 1 | - 7 | 3 | 16 | - 6 | -15 |
| | 3 | 23 | 10 | -33 | 9 | - 6 | 2 | 25 | 6 | 10 |
| | 14 | - 5 | -23 | 9 | 15 | 14 | 2 | 9 | 11 | 27 |
| | 6 | -31 | 1 | - 1 | - 4 | 12 | -10 | -25 | 3 | 2 |
| | 14 | 27 | 12 | 21 | 21 | - 4 | 34 | 6 | 34 | -18 |
| | 6 | 20 | 2 | 3 | 31 | 9 | | | | |
| 78 | 25 | -13 | 7 | - 2 | 10 | 7 | 32 | -37 | 36 | 4 |
| | 11 | 8 | 8 | 5 | -19 | 0 | 15 | 14 | - 3 | 12 |
| | -20 | 23 | 12 | 12 | - 2 | -21 | -14 | 39 | -29 | -22 |
| | -15 | 7 | - 9 | -22 | 28 | -11 | - 5 | 12 | 5 | 5 |
| | 3 | -25 | -31 | -14 | 5 | 21 | 3 | -23 | 11 | 38 |
| | 17 | -31 | 6 | 35 | -20 | 16 | - 6 | -32 | - 7 | -12 |
| | 12 | 18 | 42 | 16 | 7 | -17 | 28 | 3 | 17 | -26 |
| | 4 | 47 | 10 | -20 | 22 | 3 | 34 | | | |
| 79 | 4 | 4 | 12 | - 8 | 8 | 5 | 11 | - 8 | 3 | - 6 |
| | 15 | 18 | 14 | - 3 | 6 | 4 | 9 | 5 | 6 | 2 |
| | 4 | - 2 | 11 | 4 | - 4 | 3 | -13 | 16 | - 3 | 7 |
| | 9 | - 2 | 3 | - 9 | 5 | - 4 | -15 | - 3 | 15 | - 1 |
| | 13 | - 4 | 1 | 6 | 20 | 22 | 18 | - 2 | 23 | 9 |
| | 12 | - 2 | 12 | 1 | 0 | 17 | 10 | - 3 | 14 | 12 |
| | 7 | 20 | 19 | 18 | 5 | 3 | 13 | 25 | 10 | 3 |
| | 10 | 19 | 5 | 5 | 27 | 19 | 11 | 19 | | |
| 80 | -16 | -12 | 11 | -27 | -10 | 12 | - 2 | -32 | - 7 | 19 |
| | 13 | 18 | 11 | 38 | - 1 | 2 | 2 | - 3 | - 7 | -25 |
| | - 5 | -20 | 31 | -22 | -25 | 5 | - 9 | - 4 | -24 | - 6 |
| | 19 | 38 | 23 | -22 | -10 | -12 | -18 | 18 | 6 | -21 |
| | 23 | -22 | - 5 | 1 | 10 | 16 | 10 | - 5 | 26 | 25 |
| | 17 | -21 | 12 | -16 | -29 | - 0 | -19 | -15 | 10 | 6 |
| | 40 | 30 | 4 | 47 | 36 | - 6 | 37 | 22 | 49 | -16 |
| | -16 | - 8 | -11 | -16 | 17 | 18 | 35 | 31 | 20 | |
| 81 | - 7 | 32 | - 8 | 22 | 11 | -16 | - 3 | 38 | - 4 | -17 |
| | -22 | - 8 | -14 | - 4 | 35 | - 6 | 12 | 1 | 9 | 17 |
| | -13 | - 2 | -27 | - 9 | 2 | 10 | - 2 | -12 | - 6 | 19 |
| | - 7 | -13 | - 7 | 35 | - 2 | 4 | - 1 | -19 | - 6 | -13 |
| | - 7 | 2 | 36 | -18 | -20 | - 8 | 9 | -12 | -11 | -15 |
| | 6 | 44 | 11 | - 0 | - 2 | - 1 | 8 | 32 | 7 | - 8 |
| | 2 | -19 | 1 | - 9 | - 9 | 17 | -15 | 1 | -14 | 26 |
| | 12 | 3 | 20 | - 2 | -12 | 10 | -26 | -11 | 3 | -14 |

### Table G4 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 82 | -19 | 4 | -16 | -5 | -6 | 7 | -18 | 0 | -21 | 25 |
| | 4 | -11 | 2 | 36 | 9 | 16 | -8 | -21 | -3 | -25 |
| | 1 | -18 | 31 | -25 | -9 | 9 | 12 | -32 | 0 | -3 |
| | 21 | 51 | 28 | -2 | -14 | -5 | -1 | 17 | 6 | -17 |
| | 16 | -12 | 15 | 6 | -8 | 14 | -16 | 13 | -5 | 5 |
| | 10 | 1 | -3 | -26 | -9 | -6 | -24 | 1 | 9 | -6 |
| | 40 | -2 | -11 | 23 | 30 | 24 | 32 | -4 | 48 | 8 |
| | 1 | -22 | 2 | -7 | -10 | 15 | 11 | -6 | 1 | 29 |
| | 0 | | | | | | | | | |
| 83 | 0 | -9 | -11 | 2 | -2 | 10 | -17 | 13 | -9 | 11 |
| | 4 | -20 | 2 | -6 | -8 | 8 | -21 | -19 | 3 | -5 |
| | 25 | 5 | 1 | 17 | 18 | 6 | 32 | -15 | 43 | 4 |
| | 8 | 0 | 5 | -2 | -3 | 4 | 25 | 9 | 8 | 29 |
| | -5 | 32 | 8 | 23 | 6 | -8 | -7 | 40 | -17 | -9 |
| | -15 | 3 | -14 | -1 | 32 | 7 | 7 | 13 | 19 | 13 |
| | -3 | -14 | -5 | -12 | 11 | 32 | 5 | -17 | 1 | 30 |
| | 19 | 2 | 22 | 43 | -4 | 21 | -2 | -18 | 5 | -16 |
| | 9 | 7 | | | | | | | | |
| 84 | -10 | 14 | -16 | 10 | 5 | -0 | -8 | 18 | -8 | 8 |
| | -11 | -13 | -7 | 29 | 23 | 7 | 7 | -16 | -3 | -6 |
| | -17 | -3 | 8 | -19 | -17 | 6 | 0 | -16 | -17 | 0 |
| | 4 | 26 | 10 | 13 | -2 | 0 | -1 | 9 | 6 | -20 |
| | 1 | -18 | 24 | -13 | -19 | 13 | -9 | -5 | -11 | 7 |
| | 18 | 19 | 10 | -12 | -15 | 1 | -21 | 9 | 6 | -15 |
| | 32 | -9 | 7 | 12 | 14 | 18 | 16 | -9 | 27 | 6 |
| | 14 | -1 | 15 | -17 | -14 | 7 | -6 | 4 | 7 | 19 |
| | 33 | 36 | 3 | | | | | | | |
| 85 | -14 | 22 | -3 | 2 | 1 | -9 | -8 | 15 | -16 | -8 |
| | -16 | 3 | -9 | 17 | 24 | 1 | 13 | 0 | 3 | -1 |
| | -14 | -20 | 2 | -31 | -13 | 10 | -13 | -12 | -19 | 13 |
| | 10 | 16 | 16 | 19 | -8 | 4 | -12 | -4 | 2 | -27 |
| | 12 | -14 | 31 | -11 | -8 | 11 | 10 | -15 | 7 | -3 |
| | 20 | 26 | 22 | -14 | -12 | -3 | -5 | 15 | 11 | -7 |
| | 27 | 1 | 3 | 18 | 6 | 12 | 7 | 19 | 22 | 14 |
| | 2 | -13 | -4 | -20 | -2 | 18 | -5 | -2 | 18 | 28 |
| | 32 | 26 | -5 | 31 | | | | | | |
| 86 | 20 | 3 | 21 | 9 | 2 | -1 | 16 | -2 | 19 | -17 |
| | 6 | 14 | -1 | -19 | 1 | -7 | 9 | 19 | 9 | 16 |
| | -4 | 9 | -11 | 8 | 8 | 5 | -12 | 25 | -7 | 5 |
| | -6 | -14 | -3 | -4 | 11 | 9 | -10 | -12 | 5 | 0 |
| | 16 | 1 | 3 | 3 | 19 | 10 | 22 | -11 | 24 | 6 |
| | 16 | 12 | 7 | 16 | 6 | 12 | 17 | 7 | 7 | 13 |
| | -1 | 15 | 28 | 10 | -5 | 7 | -2 | 22 | -7 | 1 |
| | 8 | 30 | 4 | -4 | 21 | 10 | 9 | 20 | 24 | 5 |
| | 8 | -12 | -0 | 2 | 13 | | | | | |

### Table G4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 87 | -18 | 32 | - 7 | 22 | 1 | -17 | -22 | 40 | -25 | -13 |
| | -19 | - 5 | -16 | - 4 | 30 | - 2 | 5 | 4 | 7 | 3 |
| | 4 | -22 | -14 | -22 | - 2 | 26 | - 6 | -31 | 3 | 22 |
| | 13 | - 3 | 11 | 35 | -16 | 12 | - 5 | -23 | - 7 | -19 |
| | - 1 | 8 | 36 | - 2 | - 9 | - 7 | 12 | - 1 | - 2 | -27 |
| | 8 | 50 | 8 | -19 | 16 | - 8 | 13 | 38 | 9 | - 4 |
| | 1 | -17 | -24 | 2 | - 8 | 22 | -19 | 16 | - 2 | 36 |
| | 9 | -30 | - 5 | 6 | -12 | 11 | -28 | -30 | 1 | -12 |
| | 34 | 16 | 9 | 19 | 29 | 4 | | | | |
| 88 | 1 | -14 | -23 | - 5 | 15 | 18 | 10 | -22 | 8 | 30 |
| | 11 | -16 | 3 | 39 | - 6 | 15 | 5 | -27 | - 9 | - 7 |
| | -10 | 11 | 37 | - 1 | -11 | -11 | - 1 | 5 | -14 | -24 |
| | - 0 | 46 | 13 | -18 | 16 | - 6 | 8 | 41 | 15 | 2 |
| | - 1 | -26 | -13 | -10 | - 5 | 28 | -22 | - 1 | -10 | 31 |
| | 14 | -20 | 2 | 9 | -14 | 5 | -31 | -34 | - 7 | -27 |
| | 40 | - 3 | 20 | 13 | 18 | 11 | 45 | -21 | 52 | - 8 |
| | 18 | 18 | 6 | -15 | - 8 | - 1 | 25 | 29 | 15 | 34 |
| | -12 | 37 | - 5 | 27 | 17 | - 1 | -16 | | | |
| 89 | -13 | 41 | - 3 | 27 | 5 | -20 | - 6 | 50 | -11 | -20 |
| | -25 | - 4 | -17 | - 6 | 39 | - 1 | 18 | 12 | 12 | 17 |
| | -12 | -16 | -28 | -21 | - 4 | 20 | - 6 | -20 | - 5 | 28 |
| | 4 | - 9 | 3 | 45 | -10 | 10 | -10 | -27 | 3 | -26 |
| | 0 | 0 | 49 | -17 | -15 | - 2 | 15 | -12 | - 6 | -23 |
| | 11 | 39 | 15 | -18 | 0 | - 0 | 10 | 41 | 9 | - 4 |
| | 2 | -21 | - 8 | - 1 | -11 | 22 | -21 | 13 | -12 | 24 |
| | 13 | -17 | 7 | - 5 | -14 | 9 | -27 | -26 | 2 | -16 |
| | 47 | 7 | 7 | 28 | 29 | 13 | 50 | -21 | | |
| 90 | 10 | 9 | 22 | 2 | 5 | - 9 | 22 | - 6 | 13 | -18 |
| | - 1 | 25 | 6 | -15 | 2 | - 3 | 19 | 33 | 3 | 15 |
| | -11 | 5 | -15 | 2 | - 8 | - 2 | -28 | 26 | -28 | 11 |
| | - 4 | -16 | - 2 | 3 | 11 | 0 | -19 | -18 | 3 | - 8 |
| | 22 | -15 | 7 | - 1 | 13 | 11 | 26 | -30 | 36 | 10 |
| | 15 | 4 | 10 | 16 | - 7 | 14 | 18 | 7 | 5 | 12 |
| | - 7 | 19 | 16 | 11 | 1 | - 8 | - 2 | 32 | -13 | -15 |
| | 2 | 31 | 10 | -13 | 34 | 4 | 12 | 28 | 22 | 9 |
| | 6 | -16 | -15 | - 3 | 4 | 32 | - 3 | - 1 | 7 | |
| 91 | 19 | 3 | 19 | 9 | 4 | 0 | 8 | 1 | 15 | -15 |
| | - 1 | 10 | 2 | -24 | - 4 | - 2 | 2 | 17 | 3 | 17 |
| | 6 | 16 | -18 | 14 | 17 | 5 | 5 | 16 | 8 | 13 |
| | - 2 | -22 | - 3 | 3 | 8 | - 1 | 1 | -13 | 3 | 14 |
| | 3 | 15 | - 1 | 6 | 10 | - 2 | 15 | 7 | 13 | 2 |
| | - 2 | 5 | - 3 | 12 | 22 | 20 | 28 | 12 | 12 | 20 |
| | -13 | 9 | 8 | - 1 | - 5 | 5 | -10 | 12 | -25 | 2 |
| | 10 | 22 | 8 | 9 | 21 | 14 | - 1 | 13 | 13 | -12 |
| | 10 | -20 | 9 | -12 | - 1 | 24 | 1 | -21 | 5 | 18 |

## Table G4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 92 | 0 | -25 | - 3 | -12 | -13 | 13 | -21 | - 1 | -14 | 18 |
| | 15 | - 9 | 8 | -12 | -19 | 1 | -36 | -19 | 1 | -23 |
| | 38 | - 0 | 4 | 17 | 26 | 10 | 39 | -20 | 55 | 1 |
| | 14 | - 4 | 10 | -15 | -22 | 1 | 16 | 11 | 9 | 31 |
| | 2 | 43 | - 4 | 37 | 16 | -16 | - 5 | 53 | - 7 | -14 |
| | -24 | -10 | -19 | -10 | 45 | 0 | 16 | 14 | 23 | 32 |
| | - 4 | - 1 | -23 | - 6 | 13 | 24 | 1 | -10 | - 3 | 31 |
| | 12 | -13 | 3 | 48 | - 4 | 27 | - 1 | -17 | 1 | -11 |
| | - 9 | 8 | 45 | -12 | - 6 | - 1 | 10 | -16 | - 6 | -21 |
| | 26 | | | | | | | | | |
| 93 | 10 | - 9 | 9 | 3 | - 5 | 4 | 2 | - 4 | 6 | 0 |
| | 10 | 5 | 3 | -21 | -10 | - 3 | - 9 | 8 | 6 | 4 |
| | 19 | 6 | - 4 | 16 | 18 | 8 | 15 | 6 | 19 | - 1 |
| | - 0 | -16 | 1 | - 3 | - 4 | 3 | 2 | - 7 | - 2 | 19 |
| | 10 | 25 | - 1 | 20 | 15 | - 1 | 12 | 18 | 10 | 2 |
| | - 5 | - 3 | - 1 | 14 | 18 | 7 | 15 | 11 | 18 | 24 |
| | - 7 | 3 | - 1 | 1 | 2 | 5 | - 4 | 11 | -12 | 12 |
| | - 2 | 7 | 0 | 17 | 10 | 19 | 1 | 9 | 6 | - 3 |
| | - 1 | - 8 | 22 | -10 | 1 | 16 | 10 | -12 | - 1 | 2 |
| | 23 | 38 | | | | | | | | |
| 94 | - 2 | - 7 | 36 | -17 | -18 | - 6 | 4 | -23 | - 3 | - 8 |
| | 14 | 43 | 17 | - 8 | 4 | - 6 | 9 | 32 | 2 | - 9 |
| | 7 | -23 | - 2 | -11 | - 8 | 14 | -19 | 9 | -14 | 18 |
| | 20 | -11 | 9 | - 9 | -15 | - 6 | -30 | -22 | 2 | -17 |
| | 35 | - 1 | 3 | 19 | 26 | 8 | 35 | - 9 | 49 | 3 |
| | 2 | -12 | 3 | -10 | -16 | - 2 | 17 | 10 | 14 | 38 |
| | - 3 | 41 | - 5 | 24 | 19 | -13 | - 2 | 48 | - 5 | -17 |
| | -29 | - 3 | -14 | - 1 | 40 | 13 | 18 | 12 | 19 | 31 |
| | -13 | - 5 | -15 | -12 | 0 | 15 | - 6 | -15 | - 3 | 32 |
| | 11 | - 7 | 12 | | | | | | | |
| 95 | -17 | -16 | - 9 | -21 | - 6 | 20 | - 7 | -20 | - 7 | 32 |
| | 20 | - 4 | 7 | 43 | - 4 | 8 | - 5 | -26 | - 8 | -27 |
| | - 0 | -12 | 41 | -16 | -13 | - 4 | 8 | -16 | - 4 | -11 |
| | 12 | 42 | 22 | -22 | - 8 | - 8 | 0 | 32 | 11 | - 6 |
| | 16 | -13 | - 2 | 8 | 4 | 18 | -10 | 18 | - 1 | 14 |
| | 9 | -17 | 3 | -21 | -15 | 4 | -26 | -15 | 8 | 0 |
| | 41 | 10 | - 3 | 23 | 37 | 11 | 40 | - 8 | 46 | - 7 |
| | 3 | - 8 | 5 | - 6 | 0 | 19 | 24 | 11 | 19 | 42 |
| | -12 | 43 | 1 | 27 | 17 | - 4 | - 9 | 42 | -13 | - 9 |
| | -12 | 7 | - 9 | 4 | | | | | | |
| 96 | - 6 | - 2 | 11 | - 7 | - 1 | 2 | 10 | - 6 | 4 | - 2 |
| | 10 | 18 | 7 | 7 | 3 | - 4 | 9 | 6 | 0 | - 4 |
| | - 7 | - 2 | 5 | - 5 | -11 | 7 | -14 | 8 | -13 | 7 |
| | 3 | 5 | 2 | - 7 | - 8 | - 0 | -14 | 0 | 8 | -11 |
| | 17 | -13 | 1 | 3 | 12 | 16 | 17 | -12 | 20 | 7 |
| | 7 | 1 | 11 | 0 | -14 | 7 | - 2 | - 2 | 5 | 9 |
| | 15 | 21 | 10 | 22 | 15 | 1 | 7 | 17 | 8 | - 6 |
| | - 5 | 8 | 2 | -10 | 10 | 13 | 6 | 20 | 21 | 26 |
| | 7 | 7 | - 4 | 15 | 20 | 18 | 5 | 10 | 6 | 15 |
| | 10 | - 3 | 10 | 12 | 18 | | | | | |

Table G4 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 97 | -24 | 14 | -8 | -1 | -11 | -10 | -27 | 21 | -35 | 5 |
| | -6 | -1 | -3 | 18 | 20 | 1 | -7 | -8 | -1 | -15 |
| | 5 | -27 | 3 | -27 | -8 | 13 | 3 | -41 | 6 | 19 |
| | 19 | 16 | 16 | 18 | -26 | 6 | -2 | -3 | -9 | -20 |
| | 9 | 6 | 27 | 1 | -5 | -4 | 4 | 14 | -1 | -21 |
| | 2 | 27 | 3 | -39 | 4 | -10 | 2 | 33 | 6 | 7 |
| | 18 | -11 | -29 | 14 | 17 | 20 | -4 | 10 | 11 | 19 |
| | -2 | -39 | -10 | 4 | -10 | 15 | -10 | -22 | -6 | 5 |
| | 19 | 28 | 6 | 22 | 27 | -10 | 38 | -1 | 30 | -15 |
| | -7 | 14 | 0 | -1 | 21 | 0 | | | | |
| 98 | -16 | -2 | -19 | -2 | -8 | 7 | -30 | 20 | -28 | 11 |
| | 2 | -21 | -4 | 7 | 3 | 4 | -25 | -27 | -8 | -21 |
| | 23 | -11 | 8 | -5 | 10 | 9 | 36 | -45 | 38 | 6 |
| | 14 | 10 | 6 | 3 | -23 | -5 | 18 | 11 | -1 | 12 |
| | -10 | 24 | 11 | 17 | -5 | -17 | -15 | 40 | -25 | -15 |
| | -15 | 9 | -11 | -23 | 27 | -12 | 4 | 17 | 12 | 8 |
| | 7 | -23 | -29 | -10 | 8 | 28 | 2 | -25 | 4 | 31 |
| | 10 | -32 | 1 | 38 | -26 | 9 | -15 | -34 | -9 | -14 |
| | 13 | 19 | 32 | 13 | 7 | -21 | 24 | -5 | 13 | -31 |
| | -0 | 43 | 8 | -22 | 12 | -8 | 31 | | | |
| 99 | -6 | 2 | -7 | 3 | 4 | 2 | -1 | 4 | -1 | 8 |
| | -4 | -11 | -2 | 4 | 2 | 13 | -5 | -7 | -2 | -6 |
| | 2 | -2 | 12 | -2 | 5 | 7 | 8 | -14 | 2 | -8 |
| | 13 | 24 | 16 | -1 | -2 | -10 | 6 | 8 | 9 | -5 |
| | 9 | 6 | 16 | 7 | 3 | 13 | -10 | 9 | 2 | 7 |
| | 6 | 6 | -5 | -11 | 7 | -0 | -11 | 2 | 7 | -1 |
| | 15 | -7 | -0 | 3 | 20 | 28 | 23 | -6 | 22 | 4 |
| | 11 | -4 | 5 | 1 | -2 | 9 | 6 | -3 | 5 | 10 |
| | 9 | 29 | 19 | 20 | 11 | 5 | 14 | 17 | 9 | 5 |
| | 0 | 10 | 9 | 2 | 21 | 12 | 7 | 15 | | |
| 100 | -19 | 31 | -24 | 18 | 8 | -9 | -14 | 36 | -21 | 2 |
| | -24 | -19 | -15 | 23 | 35 | 5 | 8 | -14 | -2 | 1 |
| | -16 | -15 | -3 | -27 | -13 | 11 | 3 | -34 | -8 | 8 |
| | 6 | 22 | 12 | 33 | -13 | 1 | 2 | -0 | -3 | -23 |
| | -7 | -12 | 40 | -20 | -24 | 3 | -9 | -6 | -20 | -10 |
| | 14 | 41 | 15 | -20 | -7 | -6 | -14 | 21 | 8 | -20 |
| | 27 | -25 | -11 | 2 | 4 | 23 | 9 | -6 | 21 | 21 |
| | 10 | -22 | 8 | -12 | -27 | 4 | -20 | -24 | -1 | 3 |
| | 44 | 34 | 2 | 40 | 40 | -8 | 37 | 14 | 45 | -7 |
| | -16 | -13 | -18 | -17 | 15 | 10 | 38 | 28 | 22 | |

## Table 63

Correlation Matrix by Rows Below
Diagonal for FPS Item Scores
2, 3, 4, ---, 299

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 13 | | | | | | | | | |
| 3 | 20 | -13 | | | | | | | | |
| 4 | 24 | 39 | - 3 | | | | | | | |
| 5 | - 0 | 47 | -29 | 28 | | | | | | |
| 6 | - 3 | 16 | -22 | 10 | 33 | | | | | |
| 7 | 19 | 32 | 3 | 33 | 29 | 16 | | | | |
| 8 | - 2 | 17 | -26 | 9 | 31 | 27 | 3 | | | |
| 9 | 27 | 23 | 12 | 31 | - 2 | -22 | 20 | -10 | | |
| 10 | 23 | 14 | -12 | 29 | 10 | 6 | 23 | 18 | 27 | |
| 11 | 3 | 13 | - 1 | 6 | 11 | 13 | 20 | 17 | 11 | 11 |
| 12 | 3 | 7 | -23 | 3 | 30 | 42 | - 2 | 39 | -33 | 12 |
| | 6 | | | | | | | | | |
| 13 | 3 | 23 | -21 | 19 | 27 | 13 | 12 | 14 | 9 | 8 |
| | 13 | 12 | | | | | | | | |
| 14 | 16 | 9 | 16 | 13 | 11 | 11 | 22 | 3 | 10 | - 3 |
| | 13 | 3 | 8 | | | | | | | |
| 15 | 10 | 21 | 13 | 21 | - 3 | -22 | 20 | -19 | 36 | 13 |
| | 8 | -20 | 6 | 3 | | | | | | |
| 16 | -20 | 17 | -32 | 3 | 18 | 12 | - 1 | 16 | 6 | - 0 |
| | 22 | - 4 | 20 | 6 | 16 | | | | | |
| 17 | 6 | 36 | -29 | 36 | 18 | - 2 | 17 | 2 | 41 | 28 |
| | 5 | -14 | 55 | - 1 | 48 | 40 | | | | |
| 18 | 37 | 26 | 33 | 34 | - 3 | -22 | 28 | -14 | 53 | 19 |
| | 6 | -30 | 7 | 23 | 49 | - 7 | 29 | | | |
| 19 | 16 | 6 | 31 | 15 | - 8 | -11 | 16 | -13 | 24 | 3 |
| | 12 | -24 | - 6 | 12 | 25 | - 2 | 0 | 42 | | |
| 20 | 8 | 17 | 6 | 14 | 0 | -14 | 16 | -11 | 31 | 12 |
| | 16 | -34 | 0 | 11 | 38 | 19 | 30 | 33 | 33 | |
| 21 | - 8 | 21 | - 1 | 2 | 31 | 23 | 13 | 16 | -18 | - 9 |
| | 13 | 22 | 10 | 15 | -13 | 14 | -12 | 1 | 9 | - 4 |
| 22 | - 6 | 11 | -42 | 8 | 19 | 29 | 1 | 26 | - 3 | 16 |
| | 13 | 27 | 22 | - 3 | - 7 | 38 | 24 | -19 | -21 | - 4 |
| | 7 | | | | | | | | | |
| 23 | 20 | 27 | 16 | 30 | 22 | - 1 | 20 | 4 | 21 | 14 |
| | - 7 | 4 | 10 | 12 | 13 | -23 | 4 | 37 | 26 | 8 |
| | 20 | -30 | | | | | | | | |
| 24 | -11 | 13 | -23 | 1 | 27 | 30 | 6 | 31 | -19 | - 2 |
| | 10 | 31 | 6 | 8 | -16 | 32 | 4 | -16 | -10 | - 6 |
| | 30 | 29 | - 8 | | | | | | | |
| 25 | -11 | 7 | -27 | 0 | 6 | 10 | - 3 | 22 | 4 | 12 |
| | 16 | 6 | 12 | - 6 | 9 | 40 | 30 | - 9 | - 9 | 9 |
| | 4 | 40 | -33 | 24 | | | | | | |

## Table G5 Continued

### Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 26 | -17 | -5 | -1 | -12 | -10 | -5 | 0 | -2 | 12 | -3 |
| | 16 | -22 | -3 | 0 | 18 | 34 | 14 | -1 | 8 | 23 |
| | 4 | 17 | -32 | 17 | 33 | | | | | |
| 27 | -0 | 21 | -21 | 4 | 27 | 24 | 6 | 39 | -4 | 10 |
| | 9 | 27 | 16 | 6 | -13 | 17 | 7 | -13 | -10 | -9 |
| | 17 | 30 | -5 | 40 | 25 | 11 | | | | |
| 28 | -14 | -9 | -5 | -8 | -9 | 6 | -3 | -5 | 2 | -8 |
| | 23 | -15 | 10 | -3 | 16 | 37 | 13 | -8 | -1 | 12 |
| | 3 | 25 | -30 | 12 | 31 | 34 | 5 | | | |
| 29 | 0 | 18 | -22 | 12 | 39 | 44 | 8 | 36 | -25 | 7 |
| | 13 | 20 | 5 | 7 | -18 | 16 | -15 | -21 | -7 | -8 |
| | 30 | 23 | 15 | 26 | 1 | -24 | 28 | -7 | | |
| 30 | -21 | -3 | -8 | -15 | 14 | 21 | -1 | 19 | -25 | -11 |
| | 13 | 20 | 5 | 7 | -18 | 16 | -15 | -21 | -7 | -8 |
| | 26 | 20 | -14 | 28 | 17 | 15 | 28 | 23 | 23 | |
| 31 | 13 | -1 | -0 | 13 | 6 | 20 | 15 | 2 | -1 | 10 |
| | 18 | 11 | 5 | 20 | 5 | 3 | 8 | 8 | 4 | 9 |
| | 7 | 18 | -12 | 15 | 14 | 13 | 15 | 20 | 10 | 11 |
| 32 | -33 | -9 | 1 | -22 | -17 | -17 | -13 | -15 | 4 | -24 |
| | 13 | -34 | -6 | -6 | 24 | 41 | 18 | -3 | 7 | 23 |
| | 2 | 8 | -24 | 8 | 29 | 49 | -4 | 42 | -34 | 14 |
| | 2 | | | | | | | | | |
| 33 | -8 | 5 | -14 | 2 | 10 | 22 | -2 | 13 | -1 | 1 |
| | 14 | 11 | 12 | 10 | 1 | 35 | 18 | -8 | -2 | 7 |
| | 11 | 26 | -24 | 26 | 33 | 25 | 21 | 24 | 9 | 20 |
| | 27 | 21 | | | | | | | | |
| 34 | 11 | 20 | -3 | 18 | 11 | -0 | 15 | -1 | 21 | 9 |
| | 9 | -12 | 4 | 4 | 20 | 7 | 13 | 21 | 24 | 23 |
| | 4 | -3 | 14 | 8 | 8 | 6 | 12 | 2 | 0 | -3 |
| | 13 | 5 | 14 | | | | | | | |
| 35 | 10 | 9 | -22 | 8 | 30 | 35 | 4 | 34 | -20 | 20 |
| | -5 | 55 | 12 | 7 | -29 | -10 | -7 | -19 | -21 | -25 |
| | 15 | 22 | 8 | 20 | -0 | -21 | 26 | -20 | 52 | 4 |
| | 15 | -41 | 16 | 1 | | | | | | |
| 36 | 12 | -23 | -11 | -2 | -19 | 3 | -8 | 0 | -8 | 18 |
| | 1 | 2 | -7 | -3 | -3 | 9 | 4 | -12 | -5 | 7 |
| | -18 | 22 | -37 | 5 | 18 | 18 | 2 | 21 | -4 | 0 |
| | 18 | -1 | 23 | 9 | 17 | | | | | |
| 37 | -9 | -14 | -26 | -14 | 8 | 32 | -16 | 31 | -38 | 2 |
| | -9 | 48 | -1 | -3 | -43 | 11 | -15 | -43 | -24 | -26 |
| | 6 | 35 | -31 | 35 | 20 | 1 | 25 | 7 | 39 | 21 |
| | 11 | -13 | 24 | -9 | 46 | 40 | | | | |
| 38 | 9 | 29 | -23 | 26 | 45 | 33 | 14 | 35 | -14 | 17 |
| | -2 | 43 | 19 | 12 | -19 | -2 | -1 | -2 | -7 | -16 |
| | 28 | 15 | 34 | 30 | -2 | -26 | 28 | -23 | 54 | 14 |
| | 6 | -40 | 10 | 12 | 47 | -8 | 25 | | | |

## Table G5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 14 | 22 | -12 | 32 | 27 | 28 | 22 | 16 | 1 | 17 |
| | 2 | 17 | 18 | 15 | 2 | - 3 | 6 | 11 | 3 | - 1 |
| | 10 | 11 | 31 | 12 | - 2 | -16 | 14 | - 9 | 26 | 1 |
| | 8 | -23 | 8 | 18 | 26 | 1 | 9 | 41 | | |
| 40 | 13 | 2 | -14 | 16 | 17 | 31 | 18 | 24 | - 7 | 25 |
| | 3 | 29 | 9 | 11 | -16 | - 9 | - 8 | - 2 | - 6 | - 9 |
| | 9 | 17 | 9 | 12 | 3 | - 9 | 19 | -10 | 30 | 4 |
| | 15 | -37 | 6 | 7 | 37 | 21 | 27 | 35 | 34 | |
| 41 | 1 | 19 | -21 | 12 | 3 | -10 | 8 | 6 | 26 | 12 |
| | 9 | -19 | 11 | - 3 | 30 | 34 | 40 | 15 | - 1 | 21 |
| | -14 | 19 | -14 | 9 | 30 | 26 | 11 | 22 | -17 | - 2 |
| | 9 | 22 | 18 | 18 | -15 | 16 | - 9 | - 6 | 2 | - 6 |
| 42 | - 9 | -29 | - 4 | -24 | -26 | - 2 | -16 | 1 | -16 | - 7 |
| | 12 | 0 | - 8 | - 3 | - 4 | 18 | - 5 | -26 | -10 | - 5 |
| | - 8 | 23 | -51 | 10 | 26 | 32 | 5 | 35 | -12 | -17 |
| | 17 | 29 | 27 | -10 | - 3 | 44 | 29 | -29 | -17 | - 3 |
| | 14 | | | | | | | | | |
| 43 | - 6 | 40 | -33 | 18 | 40 | 19 | 15 | 21 | 4 | 6 |
| | 6 | 17 | 22 | 3 | 9 | 35 | 29 | 2 | - 6 | 1 |
| | 27 | 22 | 9 | 28 | 22 | 7 | 24 | 3 | 23 | 12 |
| | 1 | 6 | 15 | 14 | 12 | -17 | 1 | 29 | 18 | 3 |
| | 25 | -15 | | | | | | | | |
| 44 | - 1 | - 9 | - 1 | -10 | -19 | -11 | - 3 | - 4 | 16 | 6 |
| | 14 | -23 | - 1 | - 5 | 22 | 31 | 19 | 2 | 5 | 20 |
| | - 9 | 20 | -29 | 4 | 30 | 36 | - 2 | 36 | -23 | 7 |
| | 14 | 35 | 20 | 9 | -19 | 32 | - 0 | -24 | -13 | - 8 |
| | 31 | 37 | - 7 | | | | | | | |
| 45 | 3 | -29 | 1 | -14 | -22 | 3 | - 7 | - 1 | -15 | 2 |
| | 3 | 9 | - 7 | 2 | -13 | 1 | -10 | -18 | - 4 | - 2 |
| | -11 | 16 | -36 | - 1 | 14 | 13 | - 1 | 28 | 0 | 14 |
| | 25 | 5 | 16 | - 5 | 11 | 41 | 27 | -17 | - 4 | 15 |
| | 4 | 44 | -26 | 37 | | | | | | |
| 46 | 28 | -17 | 16 | 11 | -15 | - 2 | 5 | - 4 | 9 | 18 |
| | - 3 | 5 | - 6 | 15 | 1 | -23 | - 8 | 11 | 2 | - 7 |
| | -17 | - 5 | 1 | -17 | - 7 | -11 | - 6 | - 5 | 2 | -10 |
| | 13 | -23 | - 2 | 0 | 17 | 27 | 7 | 1 | 14 | 15 |
| | - 3 | 16 | -25 | 11 | 28 | | | | | |
| 47 | - 9 | - 5 | - 9 | - 6 | - 7 | 5 | - 2 | 5 | 0 | 3 |
| | 16 | 4 | 7 | - 5 | 8 | 25 | 12 | - 6 | - 3 | 4 |
| | 4 | 24 | -30 | 12 | 30 | 28 | 8 | 33 | 1 | 16 |
| | 16 | 22 | 22 | 7 | - 6 | 19 | 12 | -10 | - 9 | - 4 |
| | 27 | 37 | 4 | 43 | 30 | 3 | | | | |
| 48 | 20 | -23 | 14 | 1 | -17 | 5 | 3 | - 3 | 1 | 14 |
| | - 5 | 4 | - 9 | 13 | - 4 | -16 | - 9 | 5 | 1 | - 5 |
| | -12 | - 3 | -10 | - 7 | - 6 | 3 | - 1 | - 6 | - 5 | -11 |
| | 21 | -13 | 9 | - 6 | 19 | 33 | 17 | - 5 | 2 | 22 |
| | - 0 | 26 | -23 | 14 | 35 | 37 | 8 | | | |

### Table G5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 49 | -28 | 2 | - 7 | -18 | - 6 | -10 | - 9 | - 8 | 5 | -17 |
| | 12 | -28 | - 3 | - 1 | 22 | 50 | 24 | - 4 | - 0 | 21 |
| | 7 | 17 | -25 | 10 | 30 | 45 | 6 | 36 | -21 | 17 |
| | 3 | 62 | 22 | 1 | -30 | 3 | - 4 | -29 | -21 | -26 |
| | 31 | 28 | 17 | 33 | 5 | -25 | 27 | -12 | | |
| 50 | 8 | 1 | 1 | 9 | -17 | -18 | 1 | -11 | 32 | 12 |
| | 0 | -29 | - 2 | - 2 | 30 | 10 | 26 | 24 | 6 | 20 |
| | -23 | 1 | - 5 | - 8 | 16 | 23 | - 4 | 9 | -29 | -14 |
| | 7 | 16 | 6 | 10 | -12 | 20 | -13 | -21 | - 5 | - 6 |
| | 39 | 12 | - 7 | 25 | 11 | 12 | 17 | 21 | 20 | |
| 51 | 6 | 6 | 6 | 6 | 6 | 8 | 7 | 9 | 5 | 2 |
| | 9 | 1 | - 4 | 13 | 0 | 6 | - 1 | 7 | 14 | 6 |
| | 15 | 7 | 2 | 16 | 13 | 14 | 14 | 9 | 3 | 5 |
| | 10 | 7 | 11 | 17 | 9 | 10 | 7 | 11 | 12 | 7 |
| | 14 | 7 | 8 | 11 | 4 | 7 | 11 | 14 | 16 | 8 |
| 52 | 31 | -16 | 3 | 16 | -16 | - 1 | - 3 | - 3 | 5 | 26 |
| | -15 | 11 | - 8 | 0 | - 1 | -24 | 6 | 12 | - 4 | - 5 |
| | -31 | 3 | - 1 | -21 | - 6 | -18 | -11 | -15 | 5 | -26 |
| | 10 | -38 | - 1 | 2 | 27 | 43 | 21 | 8 | 16 | 28 |
| | 4 | 13 | -20 | 6 | 29 | 48 | 1 | 45 | -32 | 16 |
| | 3 | | | | | | | | | |
| 53 | 4 | - 5 | 4 | - 5 | - 9 | - 9 | - 3 | - 9 | - 2 | - 5 |
| | 3 | -11 | -13 | 3 | 6 | 5 | 1 | 1 | 9 | 17 |
| | - 6 | 1 | -16 | 4 | 10 | 20 | 2 | 11 | -15 | 2 |
| | 12 | 18 | 17 | 10 | - 4 | 25 | 5 | -15 | - 0 | - 4 |
| | 14 | 22 | - 7 | 23 | 18 | 13 | 14 | 13 | 17 | 17 |
| | 17 | 11 | | | | | | | | |
| 54 | 4 | 11 | -12 | 12 | 23 | 21 | 10 | 17 | - 7 | 14 |
| | 8 | 17 | 13 | 12 | - 7 | 13 | 7 | 1 | - 4 | - 2 |
| | 19 | 17 | 6 | 24 | 12 | - 2 | 17 | 9 | 23 | 7 |
| | 13 | - 8 | 13 | 10 | 23 | 11 | 16 | 28 | 24 | 17 |
| | 13 | 5 | 15 | 11 | 9 | 10 | 19 | 5 | 3 | 1 |
| | 28 | 10 | 12 | | | | | | | |
| 55 | -31 | 5 | 3 | -16 | - 4 | - 5 | -10 | - 7 | 3 | -20 |
| | 10 | -24 | 1 | - 2 | 17 | 37 | 13 | - 5 | 9 | 12 |
| | 13 | 10 | -19 | 11 | 23 | 37 | 5 | 38 | -20 | 15 |
| | - 2 | 54 | 18 | 4 | -29 | - 8 | - 9 | -22 | -17 | -26 |
| | 13 | 19 | 10 | 20 | - 4 | -19 | 20 | -17 | 55 | 7 |
| | 14 | -34 | 14 | 3 | | | | | | |
| 56 | - 3 | -31 | 39 | -31 | -26 | -12 | -11 | -15 | -17 | -21 |
| | - 8 | - 9 | -24 | 11 | -15 | -24 | -47 | - 2 | 15 | - 3 |
| | 10 | -25 | - 1 | - 6 | -20 | 6 | - 9 | 0 | -10 | 9 |
| | 3 | 10 | -10 | - 6 | - 5 | 3 | 4 | -16 | -13 | - 2 |
| | -23 | 17 | -30 | 4 | 13 | 13 | 2 | 17 | 7 | - 2 |
| | 16 | - 0 | 17 | 1 | 17 | | | | | |

Table G5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57 | -16 | -22 | 24 | -27 | -33 | -24 | -15 | -20 | 4 | -17 |
| | 9 | -41 | -16 | -2 | 20 | 20 | -5 | 2 | 17 | 22 |
| | -3 | -5 | -23 | -7 | 12 | 40 | -10 | 33 | -40 | 7 |
| | -2 | 53 | 5 | -7 | -40 | 15 | -14 | -42 | -28 | -24 |
| | 10 | 37 | -21 | 40 | 17 | -2 | 26 | 2 | 46 | 19 |
| | 9 | -17 | 21 | -6 | 43 | 39 | | | | |
| 58 | -24 | 12 | -23 | -11 | 4 | 1 | -6 | 3 | 2 | -11 |
| | 14 | -12 | 11 | -8 | 15 | 51 | 25 | -11 | -1 | 17 |
| | 12 | 29 | -27 | 26 | 36 | 44 | 16 | 35 | -9 | 23 |
| | 4 | 51 | 24 | 4 | -19 | 5 | 4 | -14 | -10 | -17 |
| | 35 | 27 | 32 | 34 | -1 | -26 | 29 | -18 | 56 | 15 |
| | 11 | -35 | 14 | 11 | 47 | -3 | 36 | | | |
| 59 | -11 | 19 | -16 | 2 | 17 | 12 | 4 | 21 | 1 | 2 |
| | 10 | 6 | 15 | 1 | 5 | 28 | 20 | -4 | -5 | 4 |
| | 17 | 21 | -10 | 26 | 28 | 24 | 30 | 13 | 10 | 15 |
| | 10 | 19 | 25 | 8 | 5 | 0 | 12 | 8 | 5 | 2 |
| | 20 | 13 | 34 | 13 | -6 | -12 | 11 | -6 | 29 | 5 |
| | 15 | -22 | 5 | 8 | 24 | -3 | 10 | 42 | | |
| 60 | -15 | -0 | 6 | -15 | -3 | -1 | 2 | 2 | 1 | -10 |
| | 15 | -9 | 2 | 7 | 8 | 21 | -4 | 1 | 3 | 4 |
| | 21 | 14 | -11 | 13 | 20 | 29 | 15 | 26 | -6 | 19 |
| | 8 | 34 | 14 | -2 | -17 | -9 | -10 | -16 | -9 | -13 |
| | 10 | 17 | 6 | 23 | -1 | -11 | 18 | -8 | 37 | 3 |
| | 16 | -33 | 8 | 4 | 37 | 20 | 34 | 34 | 29 | |
| 61 | 3 | -17 | -11 | -11 | -4 | 24 | -9 | 12 | -24 | 11 |
| | -2 | 33 | -4 | 1 | -29 | -7 | -21 | -26 | -13 | -16 |
| | 8 | 20 | -19 | 18 | 10 | 4 | 15 | 5 | 24 | 15 |
| | 21 | -19 | 15 | -7 | 31 | 36 | 43 | 12 | 3 | 20 |
| | -5 | 27 | -10 | 8 | 33 | 19 | 17 | 25 | -12 | -2 |
| | 17 | 27 | 5 | 16 | -12 | 20 | -5 | -4 | 8 | -1 |
| 62 | 20 | -30 | 38 | -8 | -35 | -16 | -5 | -20 | 9 | -5 |
| | -7 | -17 | -22 | 7 | 9 | -27 | -20 | 17 | 17 | 3 |
| | -13 | -25 | 7 | -21 | -21 | 6 | -19 | -3 | -17 | -12 |
| | 12 | -3 | -11 | 0 | -10 | 10 | -11 | -20 | -7 | 1 |
| | -7 | 8 | -36 | 9 | 19 | 30 | 0 | 29 | -10 | 16 |
| | 5 | 28 | 11 | -7 | -4 | 39 | 22 | -23 | -19 | -0 |
| | 12 | | | | | | | | | |
| 63 | -11 | -2 | -37 | -1 | 8 | 10 | -8 | 12 | -8 | 7 |
| | 11 | 11 | 12 | -10 | -5 | 35 | 23 | -22 | -19 | -2 |
| | -4 | 42 | -37 | 16 | 36 | 23 | 15 | 26 | 8 | 13 |
| | 13 | 20 | 33 | 4 | 12 | 33 | 30 | -1 | 0 | 3 |
| | 28 | 33 | 20 | 26 | 24 | -5 | 27 | 3 | 23 | 13 |
| | 4 | 1 | 12 | 9 | 15 | -20 | 8 | 35 | 23 | 9 |
| | 16 | -20 | | | | | | | | |

Table G5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 64 | 15 | -21 | 15 | -5 | -16 | 12 | -6 | -1 | -13 | 7 |
| | -5 | 17 | -12 | 10 | -14 | -25 | -25 | -6 | -2 | -16 |
| | -2 | -2 | -6 | -4 | -12 | -6 | -1 | -5 | 8 | 2 |
| | 16 | -20 | -2 | -11 | 21 | 22 | 22 | 0 | 5 | 17 |
| | -15 | 21 | -19 | 1 | 25 | 33 | -0 | 34 | -21 | 3 |
| | 3 | 30 | 6 | 3 | -16 | 33 | 3 | -18 | -10 | -2 |
| | 33 | 35 | 1 | | | | | | | |
| 65 | 6 | -19 | 39 | -15 | -22 | -13 | -6 | -20 | -0 | -12 |
| | -6 | -19 | -21 | 13 | 2 | -22 | -29 | 17 | 22 | 2 |
| | 4 | -29 | 9 | -8 | -22 | 5 | -12 | -5 | -18 | -8 |
| | -0 | 8 | -15 | -1 | -15 | 1 | -8 | -14 | -7 | -4 |
| | -16 | 5 | -28 | -1 | 8 | 13 | -8 | 22 | 4 | 6 |
| | 14 | 4 | 10 | -5 | 11 | 46 | 26 | -11 | -12 | 11 |
| | 3 | 42 | -25 | 30 | | | | | | |
| 66 | -10 | -1 | 14 | -10 | -2 | 4 | 5 | -3 | -5 | -15 |
| | -0 | -3 | -3 | 15 | -6 | -3 | -21 | 8 | 9 | -1 |
| | 24 | -11 | 16 | 5 | -11 | 4 | -0 | -2 | 5 | 14 |
| | 2 | 4 | -3 | -0 | -8 | -23 | -11 | 4 | 1 | 1 |
| | -13 | -9 | 5 | -10 | -8 | -11 | -2 | -4 | 12 | -4 |
| | 10 | -26 | -9 | 2 | 14 | 21 | 9 | 6 | 13 | 19 |
| | -0 | 7 | -18 | 12 | 26 | | | | | |
| 67 | 9 | -22 | 3 | -8 | -17 | 4 | -5 | -0 | -7 | -2 |
| | -6 | 7 | -11 | 10 | -10 | -3 | -11 | -4 | -4 | -9 |
| | -6 | 4 | -15 | 4 | 1 | 9 | -4 | -0 | -2 | -3 |
| | 13 | 0 | 5 | -8 | 11 | 21 | 20 | -8 | -3 | 7 |
| | 0 | 19 | -15 | 12 | 23 | 18 | 11 | 30 | 3 | 16 |
| | 7 | 20 | 9 | 1 | -4 | 19 | 11 | -2 | -5 | -1 |
| | 22 | 29 | 5 | 40 | 24 | 12 | | | | |
| 68 | -1 | -8 | 27 | -16 | -5 | -2 | -1 | -11 | -5 | -17 |
| | -10 | -7 | -14 | 2 | -2 | -17 | -30 | 7 | 18 | -5 |
| | 14 | -28 | 15 | -7 | -19 | -7 | -11 | -10 | -4 | -1 |
| | -14 | 1 | -11 | 7 | -6 | -12 | -9 | -2 | -6 | -5 |
| | -15 | -12 | -12 | -8 | -10 | 1 | -7 | -8 | 0 | -8 |
| | 15 | -11 | 12 | 1 | 13 | 35 | 17 | -10 | -2 | 9 |
| | 3 | 20 | -29 | 4 | 32 | 27 | 6 | | | |
| 69 | 21 | -14 | -1 | 5 | -16 | -0 | -3 | 5 | 6 | 28 |
| | -9 | 10 | -9 | -2 | -7 | -13 | -0 | -1 | -8 | -4 |
| | -25 | 7 | -7 | -13 | 1 | -6 | -7 | -4 | 4 | -20 |
| | 9 | -29 | 0 | -1 | 23 | 45 | 24 | 4 | 6 | 23 |
| | 2 | 15 | -19 | 16 | 29 | 40 | 12 | 34 | -24 | 16 |
| | 1 | 53 | 10 | 4 | -24 | 1 | -5 | -23 | -16 | -21 |
| | 31 | 23 | 12 | 27 | -1 | -17 | 19 | -5 | | |

### Table G5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 | 3 | - 7 | 2 | - 9 | 11 | 14 | 0 | 7 | -19 | 3 |
| | -10 | 24 | - 6 | 3 | -22 | -13 | -19 | -14 | - 6 | -16 |
| | 11 | - 4 | 1 | 9 | - 4 | -14 | - 2 | -12 | 23 | 4 |
| | - 1 | -25 | - 2 | - 8 | 25 | 9 | 25 | 21 | 6 | 17 |
| | -19 | 1 | - 6 | -14 | 6 | 15 | - 4 | 10 | -19 | -14 |
| | 11 | 16 | - 0 | 13 | -13 | 13 | -10 | -19 | - 8 | - 7 |
| | 28 | 4 | - 8 | 18 | 8 | 8 | 10 | 25 | 21 | |
| 71 | 10 | 8 | 1 | 13 | 3 | - 0 | 11 | 7 | 11 | 17 |
| | 7 | - 2 | 3 | 3 | 14 | 1 | 7 | 11 | 6 | 10 |
| | 7 | 0 | 11 | 2 | 2 | 1 | 1 | - 5 | 1 | - 3 |
| | - 1 | - 7 | - 5 | 8 | 8 | 8 | - 6 | 4 | 13 | 14 |
| | 5 | 0 | 4 | 13 | 1 | 13 | 6 | 13 | - 4 | 10 |
| | 12 | 13 | 5 | 18 | - 3 | 1 | 3 | 0 | 6 | 6 |
| | 7 | 10 | - 2 | 14 | 13 | 15 | 20 | 16 | 17 | 17 |
| 72 | -20 | - 6 | 23 | -24 | - 1 | 4 | - 0 | - 3 | -23 | -24 |
| | - 3 | 3 | -15 | 8 | -18 | - 9 | -39 | -10 | 12 | -11 |
| | 28 | -16 | 7 | 11 | -15 | 8 | 3 | - 3 | 6 | 22 |
| | - 9 | 16 | - 9 | - 5 | - 7 | -24 | - 0 | - 1 | - 5 | - 4 |
| | -30 | - 7 | - 2 | -17 | -13 | -17 | - 7 | -16 | 11 | -22 |
| | 17 | -35 | - 3 | 1 | 24 | 42 | 23 | 7 | 7 | 24 |
| | 5 | 8 | -14 | 10 | 31 | 42 | 4 | 42 | -27 | 19 |
| | 5 | | | | | | | | | |
| 73 | 9 | - 7 | 17 | - 5 | -10 | - 4 | - 2 | - 2 | - 1 | - 0 |
| | 0 | - 6 | - 6 | 4 | - 1 | -11 | -16 | 2 | 4 | - 3 |
| | 1 | -11 | 3 | - 8 | -10 | - 2 | - 4 | 0 | - 6 | - 3 |
| | - 5 | - 8 | - 5 | - 6 | 1 | 6 | - 4 | - 2 | 7 | 8 |
| | - 8 | 4 | -13 | 5 | 9 | 15 | 2 | 9 | - 9 | 2 |
| | 8 | 12 | 10 | 7 | 1 | 25 | 14 | -14 | - 6 | 4 |
| | 14 | 22 | -11 | 29 | 23 | 12 | 16 | 22 | 15 | 15 |
| | 25 | 17 | | | | | | | | |
| 74 | - 6 | - 2 | - 8 | - 5 | - 3 | 7 | - 2 | 9 | - 2 | 5 |
| | 12 | 0 | - 8 | 1 | 0 | 20 | 4 | - 4 | - 5 | 11 |
| | 6 | 16 | -24 | 18 | 22 | 25 | 14 | 13 | - 4 | 11 |
| | 12 | 16 | 16 | 2 | - 5 | 14 | 10 | - 4 | - 4 | 1 |
| | 19 | 21 | 14 | 25 | 11 | - 2 | 25 | 11 | 27 | 12 |
| | 18 | - 1 | 15 | 11 | 16 | 9 | 17 | 32 | 21 | 24 |
| | 18 | - 1 | 22 | 15 | 6 | 8 | 20 | - 3 | 6 | - 2 |
| | 19 | 4 | 11 | | | | | | | |
| 75 | 25 | - 9 | - 4 | 14 | -12 | - 4 | 4 | - 3 | 16 | 23 |
| | - 8 | - 3 | - 3 | - 0 | 10 | -12 | 11 | 13 | - 4 | 4 |
| | -29 | 2 | - 3 | -24 | - 5 | -10 | -12 | -11 | - 4 | -29 |
| | 10 | -25 | - 4 | 1 | 14 | 37 | 8 | - 5 | 10 | 17 |
| | 13 | 10 | -15 | 13 | 22 | 33 | 8 | 33 | -18 | 20 |
| | - 1 | 49 | 9 | 6 | -25 | - 7 | - 7 | -18 | -13 | -28 |
| | 9 | 20 | 13 | 25 | - 0 | -19 | 20 | -13 | 49 | 5 |
| | 17 | -31 | 10 | 8 | | | | | | |

Table G5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 76 | 18 | 12 | 26 | 17 | - 5 | -18 | 19 | -16 | 34 | 9 |
| | 1 | -27 | 1 | 10 | 31 | -21 | 7 | 41 | 25 | 19 |
| | - 4 | -30 | 39 | -24 | -26 | - 8 | -18 | -18 | -16 | -18 |
| | - 8 | -10 | -29 | 5 | -21 | -22 | -47 | - 5 | 8 | - 6 |
| | 4 | -25 | - 8 | - 4 | -23 | 12 | - 8 | - 4 | - 6 | 15 |
| | 2 | 2 | - 6 | - 3 | - 1 | 8 | 9 | -10 | - 7 | 3 |
| | -23 | 25 | -33 | 2 | 18 | 16 | 1 | 18 | 1 | - 0 |
| | 18 | 7 | 18 | 6 | 19 | | | | | |
| 77 | 32 | -11 | 21 | 14 | -13 | - 6 | 11 | -10 | 13 | 17 |
| | -14 | 3 | - 7 | 13 | 7 | -44 | -11 | 25 | 7 | - 3 |
| | -18 | -23 | -25 | -31 | -36 | -24 | -19 | -33 | 1 | -30 |
| | 3 | -42 | -22 | - 4 | 16 | 10 | - 9 | 5 | 15 | 18 |
| | -13 | -11 | -19 | -13 | 5 | 37 | -14 | 31 | -38 | 8 |
| | - 8 | 45 | - 4 | - 3 | -34 | 17 | -13 | -40 | -22 | -21 |
| | 9 | 36 | -25 | 40 | 21 | 3 | 26 | 8 | 37 | 16 |
| | 17 | -11 | 20 | - 5 | 44 | 44 | | | | |
| 78 | 14 | -27 | - 6 | - 1 | -23 | - 7 | -11 | 0 | - 4 | 19 |
| | - 3 | 5 | - 8 | - 4 | - 8 | - 7 | - 2 | -11 | -16 | - 1 |
| | -26 | 16 | -26 | - 7 | 9 | 5 | - 5 | 11 | - 4 | - 8 |
| | 12 | -14 | 3 | - 6 | 13 | 49 | 26 | - 9 | - 4 | 14 |
| | 8 | 33 | -19 | 26 | 40 | 32 | 21 | 32 | -10 | 17 |
| | 0 | 41 | 19 | 7 | -19 | 2 | 7 | - 5 | -11 | -13 |
| | 33 | 18 | 28 | 29 | - 5 | -19 | 28 | -14 | 52 | 6 |
| | 12 | -28 | 13 | 21 | 45 | - 5 | 28 | | | |
| 79 | 4 | -12 | - 6 | - 0 | -11 | - 3 | 5 | - 1 | 1 | 11 |
| | 10 | - 5 | 3 | - 4 | 6 | 7 | 7 | - 2 | - 8 | 11 |
| | -11 | 14 | -22 | - 2 | 12 | 15 | - 4 | 15 | - 8 | 4 |
| | 18 | 9 | 8 | - 1 | - 2 | 25 | 2 | -16 | - 4 | - 0 |
| | 19 | 26 | - 2 | 32 | 30 | 17 | 29 | 14 | 10 | 18 |
| | 4 | 16 | 20 | 12 | 5 | - 1 | 14 | 13 | 2 | 8 |
| | 13 | 14 | 28 | 9 | - 7 | - 8 | 14 | - 9 | 29 | 0 |
| | 13 | -19 | 4 | 21 | 27 | 3 | 9 | 42 | | |
| 80 | 24 | - 2 | 0 | 14 | -10 | -10 | 9 | - 8 | 13 | 15 |
| | 5 | - 5 | 6 | - 2 | 19 | - 2 | 16 | 12 | - 1 | 10 |
| | -24 | 2 | - 6 | -17 | 7 | 5 | - 6 | 1 | - 9 | -11 |
| | 16 | - 9 | 1 | 7 | - 1 | 20 | -10 | - 3 | 3 | 4 |
| | 16 | 10 | - 8 | 22 | 18 | 26 | 18 | 15 | - 8 | 23 |
| | 2 | 30 | 12 | 7 | -12 | -11 | - 1 | - 6 | - 1 | - 8 |
| | 7 | 19 | 8 | 17 | - 2 | - 6 | 22 | - 7 | 29 | - 1 |
| | 16 | -31 | 9 | 14 | 37 | 19 | 30 | 36 | 35 | |
| 81 | -21 | - 8 | 18 | -19 | -21 | -17 | - 2 | -16 | - 2 | -21 |
| | 7 | -25 | -15 | 6 | 11 | 9 | - 9 | 4 | 8 | 16 |
| | 8 | -12 | -13 | 0 | 3 | 28 | -11 | 16 | -24 | 11 |
| | 1 | 37 | 6 | - 4 | -30 | 1 | -11 | -29 | -21 | -22 |
| | 4 | 16 | -10 | 21 | 10 | - 7 | 14 | 1 | 29 | 9 |
| | 8 | -21 | 15 | - 7 | 26 | 26 | 36 | 19 | 5 | 27 |
| | - 2 | 13 | 0 | 6 | 26 | 20 | 19 | 18 | -16 | - 0 |
| | 9 | 27 | 12 | 23 | -14 | 12 | - 6 | 3 | 11 | - 6 |

## Table G5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 82 | 13 | 12 | 19 | 11 | 9 | - 5 | 12 | - 7 | 11 | - 1 |
| | - 9 | - 3 | 0 | 10 | 8 | -20 | -11 | 28 | 23 | 1 |
| | 16 | -26 | 43 | - 7 | -23 | -19 | - 8 | -18 | 6 | -11 |
| | - 9 | -15 | -20 | 10 | - 2 | -29 | -24 | 13 | 12 | - 4 |
| | -16 | -32 | 6 | -21 | -23 | 3 | -17 | - 8 | -16 | - 8 |
| | 8 | - 6 | - 6 | 4 | - 3 | 15 | - 9 | -18 | -10 | 5 |
| | - 6 | 15 | -36 | 8 | 27 | 31 | 4 | 35 | - 7 | 17 |
| | 20 | 24 | 19 | - 3 | - 3 | 37 | 24 | -24 | -19 | - 5 |
| | 8 | | | | | | | | | |
| 83 | - 8 | -44 | 13 | -29 | -34 | - 4 | -27 | -11 | -28 | -12 |
| | -10 | - 6 | -23 | - 8 | -21 | -10 | -27 | -25 | - 7 | -11 |
| | -15 | 5 | -41 | - 3 | 7 | 18 | - 9 | 17 | -18 | 9 |
| | 13 | 16 | 9 | -15 | - 9 | 35 | 25 | -26 | -22 | - 1 |
| | - 3 | 46 | -34 | 20 | 37 | 15 | 14 | 25 | 11 | 7 |
| | 8 | 11 | 19 | - 3 | 6 | 35 | 31 | 5 | - 0 | 14 |
| | 32 | 25 | 16 | 29 | 23 | 0 | 23 | 7 | 19 | 7 |
| | - 7 | 10 | 13 | 15 | 4 | -19 | 4 | 31 | 19 | 3 |
| | 25 | -18 | | | | | | | | |
| 84 | - 6 | 3 | 28 | -10 | - 5 | -15 | 4 | -17 | 10 | -16 |
| | - 2 | -26 | - 8 | 8 | 15 | -12 | -15 | 17 | 17 | 8 |
| | 11 | -26 | 22 | -11 | -19 | 8 | - 5 | - 4 | -19 | 2 |
| | - 5 | 13 | -13 | - 2 | -24 | -29 | -33 | -12 | - 9 | -17 |
| | - 1 | -14 | - 1 | - 3 | -19 | - 7 | - 6 | -11 | 14 | 6 |
| | 14 | -23 | 1 | -10 | 21 | 27 | 22 | 1 | 3 | 24 |
| | -10 | 18 | -29 | 1 | 31 | 31 | 4 | 35 | -21 | 3 |
| | 5 | 35 | 19 | 6 | -17 | 33 | 10 | -20 | - 5 | 0 |
| | 32 | 33 | 0 | | | | | | | |
| 85 | 22 | 23 | 14 | 22 | 7 | - 9 | 23 | - 7 | 33 | 14 |
| | 1 | -12 | 4 | 13 | 22 | -16 | 9 | 41 | 24 | 12 |
| | 5 | -19 | 39 | -12 | -21 | -15 | - 9 | -21 | - 6 | -18 |
| | - 5 | -19 | -18 | 12 | - 3 | -20 | -32 | 10 | 19 | 2 |
| | 1 | -32 | - 9 | -12 | -22 | 8 | -13 | - 7 | -18 | 6 |
| | 10 | 9 | - 2 | 7 | - 8 | 0 | - 8 | -16 | -10 | - 2 |
| | -10 | 11 | -31 | 6 | 14 | 10 | 1 | 28 | 3 | 12 |
| | 23 | 5 | 17 | - 7 | 14 | 44 | 30 | -12 | - 9 | 12 |
| | 3 | 41 | -29 | 36 | | | | | | |
| 86 | 7 | 20 | - 8 | 16 | 9 | -11 | 14 | - 1 | 30 | 14 |
| | - 2 | -16 | 6 | - 1 | 30 | 8 | 28 | 25 | 7 | 19 |
| | - 4 | - 3 | 15 | - 9 | 6 | 3 | - 4 | - 8 | - 8 | -29 |
| | - 1 | - 2 | - 4 | 16 | - 3 | - 2 | -21 | 0 | 12 | - 2 |
| | 29 | -14 | 15 | 9 | -12 | 6 | 3 | - 3 | 4 | 23 |
| | 7 | 8 | 3 | 12 | 1 | -17 | - 1 | 7 | 11 | 1 |
| | -13 | 0 | - 1 | -15 | - 5 | - 2 | - 2 | 1 | 16 | - 0 |
| | 15 | -16 | - 2 | 12 | 21 | 29 | 13 | 1 | 10 | 18 |
| | - 5 | 16 | -22 | 13 | 28 | | | | | |

### Table G5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 87 | 0 | -4 | 20 | -4 | -8 | -8 | 3 | -8 | 7 | -6 |
| | -3 | -14 | -17 | 5 | 10 | -8 | -12 | 12 | 15 | 6 |
| | 5 | -19 | 6 | -2 | -7 | 6 | -7 | -2 | -11 | -7 |
| | -1 | 8 | -8 | -1 | -8 | -6 | -7 | -8 | -4 | -5 |
| | -3 | -0 | -9 | 2 | -1 | 3 | 3 | 6 | 7 | 2 |
| | 13 | -0 | 12 | 1 | 11 | 27 | 17 | -3 | 1 | 9 |
| | 5 | 20 | -20 | 9 | 31 | 20 | 13 | 36 | 3 | 15 |
| | 12 | 23 | 10 | 3 | -2 | 11 | 6 | -6 | 0 | -3 |
| | 22 | 25 | 7 | 33 | 21 | 10 | | | | |
| 88 | 16 | 27 | -3 | 21 | 13 | -6 | 18 | -5 | 31 | 22 |
| | 7 | -13 | 9 | 6 | 28 | 0 | 23 | 29 | 7 | 16 |
| | -1 | -4 | 28 | -12 | -6 | -9 | -7 | -9 | -3 | -19 |
| | -4 | -11 | -10 | 10 | -4 | -12 | -28 | 4 | 17 | -1 |
| | 18 | -21 | 17 | 3 | -15 | 8 | -1 | -8 | -0 | 14 |
| | 5 | 5 | -4 | 17 | -2 | -12 | -3 | 5 | 4 | 1 |
| | -14 | -1 | -7 | 2 | -2 | 11 | -2 | -3 | 2 | -8 |
| | 24 | -7 | 17 | 10 | 20 | 37 | 21 | -2 | 1 | 14 |
| | 5 | 29 | -30 | 14 | 35 | 34 | 3 | | | |
| 89 | -15 | -14 | 22 | -25 | -4 | 3 | -6 | -4 | -23 | -25 |
| | -2 | 3 | -11 | 13 | -18 | -9 | -39 | -11 | 7 | -12 |
| | 27 | -12 | 3 | 9 | -15 | 1 | 2 | 8 | 6 | 22 |
| | -1 | 13 | -4 | -12 | -7 | -15 | 2 | -0 | -6 | -8 |
| | -27 | 3 | -8 | -10 | 2 | -9 | -2 | -6 | 12 | -21 |
| | 11 | -27 | -3 | 0 | 22 | 46 | 20 | 1 | 2 | 22 |
| | 7 | 12 | -19 | 15 | 32 | 33 | 11 | 32 | -19 | 13 |
| | -2 | 57 | 15 | 6 | -26 | 0 | -5 | -23 | -12 | -24 |
| | 29 | 24 | 15 | 31 | 0 | -20 | 25 | -4 | | |
| 90 | -14 | 7 | 7 | -6 | -5 | -15 | 7 | -15 | 14 | -10 |
| | 2 | -26 | -3 | 1 | 20 | 8 | 5 | 16 | 13 | 18 |
| | 6 | -12 | 7 | 0 | -3 | 18 | -6 | 6 | -20 | -5 |
| | -6 | 26 | 1 | 2 | -28 | -15 | -29 | -15 | -4 | -22 |
| | 13 | -2 | 9 | 12 | -12 | -12 | 9 | -10 | 23 | 9 |
| | 4 | -23 | 8 | -2 | 25 | 11 | 25 | 20 | 7 | 18 |
| | -20 | 2 | 0 | -10 | 12 | 18 | 1 | 15 | -20 | -8 |
| | 16 | 20 | 9 | 10 | -7 | 21 | -7 | -13 | -1 | -4 |
| | 30 | 13 | -11 | 29 | 17 | 10 | 17 | 21 | 19 | |
| 91 | 4 | 5 | -8 | 2 | 8 | 11 | 7 | 10 | -5 | 8 |
| | 5 | 8 | 8 | 3 | -3 | 0 | -3 | -3 | -3 | -3 |
| | 12 | 8 | -1 | 16 | 6 | 4 | 14 | 1 | 12 | 8 |
| | 14 | -7 | 5 | 4 | 9 | 4 | 11 | 8 | 11 | 13 |
| | 6 | 9 | 14 | -2 | 3 | 1 | 11 | 3 | 5 | -3 |
| | 8 | -1 | -0 | 13 | -1 | 6 | -3 | 7 | 17 | 7 |
| | 17 | -1 | 12 | 19 | 9 | 17 | 18 | 4 | 5 | 10 |
| | 15 | 15 | 8 | 20 | 9 | 5 | 9 | 7 | 7 | 3 |
| | 10 | 11 | -0 | 8 | 5 | 10 | 12 | 14 | 15 | 10 |

## Table G5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 92 | 16 | 24 | 1 | 28 | 1 | -22 | 17 | -15 | 46 | 17 |
| | 4 | -34 | 12 | 0 | 47 | 4 | 42 | 44 | 14 | 30 |
| | -18 | -10 | 23 | -26 | -4 | 1 | -13 | 0 | -22 | -27 |
| | -3 | 3 | -9 | 13 | -22 | -6 | -42 | -9 | 7 | -10 |
| | 27 | -16 | 12 | 10 | -13 | 9 | 0 | -5 | 4 | 27 |
| | -6 | 7 | -0 | -2 | -2 | -23 | 6 | 5 | 2 | -1 |
| | -33 | 4 | 1 | -15 | -9 | -9 | -15 | -10 | 7 | -25 |
| | 12 | -29 | 0 | -1 | 30 | 44 | 24 | 4 | 13 | 22 |
| | 0 | 11 | -26 | 10 | 30 | 44 | -4 | 43 | -31 | 16 |
| | -3 | | | | | | | | | |
| 93 | 2 | 14 | 5 | 5 | 8 | -1 | 22 | -5 | 10 | -6 |
| | 5 | -8 | 12 | 11 | 11 | -2 | 3 | 16 | 11 | 6 |
| | 16 | -10 | 22 | -1 | -10 | 1 | 1 | 1 | 0 | 6 |
| | -1 | -0 | -7 | 2 | -4 | -18 | -19 | 5 | 8 | 3 |
| | 4 | -14 | 14 | -2 | -9 | -5 | 3 | -8 | 4 | -0 |
| | 1 | -12 | -8 | 2 | -2 | 2 | 4 | 3 | 9 | 14 |
| | -5 | 4 | -12 | 6 | 7 | 20 | 0 | 13 | -9 | 6 |
| | 11 | 13 | 15 | 4 | -0 | 30 | 14 | -11 | -3 | 2 |
| | 13 | 29 | -15 | 27 | 24 | 14 | 12 | 25 | 13 | 16 |
| | 20 | 22 | | | | | | | | |
| 94 | 9 | -7 | 8 | 1 | -8 | -3 | 7 | -8 | 4 | 2 |
| | 4 | -10 | -4 | 8 | 9 | -2 | -0 | 5 | -3 | 5 |
| | -1 | -2 | -10 | -6 | 4 | 16 | -5 | 11 | -4 | 3 |
| | 15 | 4 | 1 | 1 | -7 | 14 | -3 | -8 | 0 | 1 |
| | 11 | 12 | -10 | 19 | 22 | 18 | 17 | 8 | 7 | 14 |
| | 8 | 13 | 13 | 8 | -3 | 8 | 13 | 3 | -4 | 7 |
| | 16 | 24 | 3 | 17 | 7 | 2 | 15 | 4 | 18 | 6 |
| | 13 | -2 | 13 | 12 | 15 | 8 | 12 | 25 | 27 | 22 |
| | 16 | 3 | 15 | 11 | 8 | 8 | 13 | 10 | 3 | 5 |
| | 22 | 7 | 14 | | | | | | | |
| 95 | -18 | -11 | 16 | -24 | 1 | 11 | -9 | 6 | -28 | -26 |
| | -5 | 15 | -16 | 8 | -24 | -10 | -38 | -18 | 6 | -21 |
| | 25 | -10 | -2 | 17 | -9 | 2 | 10 | -7 | 16 | 21 |
| | -6 | 3 | 0 | -6 | 6 | -16 | 18 | 7 | -2 | 3 |
| | -34 | 1 | -3 | -18 | -6 | -13 | -9 | -5 | 4 | -26 |
| | 12 | -22 | -1 | 0 | 19 | 38 | 10 | 1 | 5 | 12 |
| | 11 | 8 | -19 | 10 | 26 | 29 | 11 | 29 | -17 | 22 |
| | -4 | 53 | 8 | 3 | -29 | -10 | -7 | -22 | -22 | -25 |
| | 14 | 17 | 12 | 21 | -4 | -23 | 26 | -24 | 47 | 6 |
| | 14 | -41 | 5 | 2 | | | | | | |
| 96 | 10 | 29 | -23 | 25 | 38 | 21 | 20 | 26 | 1 | 12 |
| | -4 | 34 | 22 | 7 | -8 | 2 | 12 | 1 | -12 | -11 |
| | 21 | 11 | 25 | 18 | -3 | -17 | 22 | -14 | 41 | 5 |
| | 4 | -28 | 3 | 8 | 33 | -18 | 11 | 43 | 25 | 16 |
| | 3 | -29 | 36 | -23 | -20 | -12 | -7 | -10 | -14 | -11 |
| | 1 | -3 | -20 | 14 | -18 | -27 | -44 | -5 | 16 | -6 |
| | 8 | -17 | -1 | -3 | -15 | 11 | -5 | -5 | -2 | 15 |
| | 9 | 1 | -7 | -4 | -2 | 4 | 4 | -10 | -13 | 1 |
| | -23 | 17 | -36 | 1 | 18 | 12 | -2 | 14 | -2 | -9 |
| | 18 | 1 | 23 | 6 | 12 | | | | | |

### Table G5 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 97 | -17 | 21 | 3 | - 5 | 26 | 7 | 7 | 10 | - 6 | -24 |
| | - 1 | 12 | 5 | 6 | - 6 | 2 | -14 | - 0 | 9 | - 6 |
| | 36 | -11 | 30 | 18 | -13 | - 7 | 13 | -12 | 20 | 18 |
| | - 9 | 4 | - 6 | 4 | - 0 | -47 | - 9 | 22 | 5 | - 3 |
| | -18 | -33 | 26 | -26 | -34 | -35 | -17 | -32 | 7 | -26 |
| | 4 | -45 | -17 | - 2 | 16 | 15 | - 8 | 8 | 10 | 16 |
| | -12 | -10 | -25 | -16 | 9 | 35 | -14 | 30 | -33 | 11 |
| | - 4 | 47 | 0 | - 7 | -36 | 9 | -15 | -45 | -27 | -31 |
| | 6 | 33 | -28 | 33 | 15 | - 2 | 21 | 4 | 37 | 14 |
| | 6 | -16 | 22 | -10 | 45 | 35 | | | | |
| 98 | -11 | -24 | 33 | -30 | -18 | - 6 | - 8 | -12 | -25 | -27 |
| | - 5 | - 3 | -20 | 8 | -18 | -19 | -44 | - 7 | 10 | -12 |
| | 19 | -21 | - 5 | 2 | -16 | 8 | - 9 | 5 | - 7 | 15 |
| | 2 | 15 | - 6 | -17 | -11 | - 6 | 2 | -16 | -18 | -10 |
| | -24 | 16 | -26 | - 4 | 13 | - 3 | - 1 | 7 | 9 | - 7 |
| | 10 | -12 | 11 | - 9 | 14 | 53 | 26 | - 4 | - 6 | 20 |
| | 16 | 30 | -23 | 26 | 44 | 29 | 20 | 34 | -13 | 16 |
| | - 3 | 50 | 18 | 4 | -20 | 2 | 5 | -10 | - 9 | -17 |
| | 36 | 18 | 38 | 34 | - 3 | -26 | 28 | -20 | 51 | 12 |
| | 8 | -32 | 10 | 11 | 47 | -14 | 25 | | | |
| 99 | 4 | -15 | 11 | -10 | - 9 | - 1 | - 6 | 3 | -11 | - 8 |
| | - 6 | 5 | -10 | 9 | -15 | -13 | -20 | - 2 | - 6 | -11 |
| | 8 | - 3 | - 7 | 8 | - 4 | 5 | 3 | 0 | 4 | 4 |
| | 12 | - 1 | 0 | - 8 | 6 | 4 | 10 | - 1 | - 5 | 8 |
| | - 7 | 16 | -19 | 2 | 14 | 11 | 4 | 14 | 2 | 2 |
| | 13 | 5 | 11 | - 1 | 1 | 22 | 8 | - 4 | - 1 | 13 |
| | 15 | 18 | -10 | 22 | 31 | 22 | 24 | 14 | 3 | 14 |
| | 7 | 23 | 14 | 8 | 4 | 1 | 6 | 9 | 2 | 5 |
| | 15 | 10 | 24 | 11 | - 2 | - 7 | 18 | - 4 | 27 | 7 |
| | 14 | -17 | 4 | 11 | 26 | - 3 | 4 | 39 | | |
| 100 | -13 | - 6 | 4 | -14 | 8 | 12 | - 4 | 9 | -18 | -13 |
| | - 3 | 16 | -10 | 6 | -23 | - 4 | -24 | -12 | 0 | -20 |
| | 23 | - 0 | 1 | 21 | - 3 | 2 | 10 | - 7 | 19 | 13 |
| | 4 | - 4 | 8 | - 3 | 13 | - 8 | 14 | 11 | - 3 | 2 |
| | -16 | 3 | 0 | -10 | - 1 | - 4 | - 1 | 7 | 3 | -12 |
| | 18 | -13 | 8 | 6 | 2 | 21 | 1 | - 2 | 5 | 14 |
| | 15 | 4 | - 8 | 17 | 24 | 27 | 19 | 24 | -10 | 16 |
| | 5 | 35 | 12 | 3 | -13 | -10 | - 7 | -11 | - 9 | -12 |
| | 7 | 19 | 8 | 13 | 5 | - 9 | 21 | - 8 | 32 | 9 |
| | 11 | -30 | 1 | 4 | 36 | 14 | 30 | 36 | 39 | |

## Table G6

Correlation Matrix by Rows Below
Diagonal for FPS Item Scores
3, 6, 9, ----, 300

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 22 | | | | | | | | | |
| 3 | 16 | - 3 | | | | | | | | |
| 4 | - 4 | - 2 | 8 | | | | | | | |
| 5 | -10 | -13 | 2 | 23 | | | | | | |
| 6 | 9 | 17 | 13 | 2 | 6 | | | | | |
| 7 | 13 | 25 | -22 | - 2 | -26 | - 1 | | | | |
| 8 | - 2 | 11 | - 6 | 15 | 3 | -11 | 21 | | | |
| 9 | 20 | 14 | 6 | 2 | - 4 | 17 | 23 | 13 | | |
| 10 | - 3 | 23 | -26 | - 3 | -17 | - 8 | 40 | 21 | 8 | |
| 11 | - 1 | 8 | 1 | 13 | 24 | 15 | 2 | 12 | 11 | - 6 |
| 12 | 1 | 10 | -19 | 14 | 27 | 3 | 3 | 11 | 3 | 0 |
| | 33 | | | | | | | | | |
| 13 | - 7 | -16 | 3 | 21 | 13 | -20 | 9 | 34 | 7 | 12 |
| | 7 | 6 | | | | | | | | |
| 14 | 7 | 8 | 1 | - 1 | 9 | 11 | - 4 | 1 | 23 | - 3 |
| | 17 | 7 | 5 | | | | | | | |
| 15 | 7 | 17 | - 4 | 12 | 0 | 9 | 13 | 22 | 10 | 7 |
| | 13 | 18 | 7 | 2 | | | | | | |
| 16 | 6 | 3 | 23 | 18 | 2 | 3 | 6 | 28 | - 1 | - 3 |
| | 6 | 7 | 29 | -13 | 30 | | | | | |
| 17 | -14 | -12 | 8 | 19 | 41 | 9 | -23 | - 1 | -14 | -15 |
| | 21 | 21 | 6 | 6 | 4 | 6 | | | | |
| 18 | 22 | 6 | 30 | 0 | -14 | 16 | - 9 | - 6 | 8 | -20 |
| | - 5 | -13 | - 7 | -11 | 10 | 31 | - 3 | | | |
| 19 | 11 | - 7 | 37 | 4 | 23 | 8 | -23 | -14 | 14 | -34 |
| | 13 | - 0 | 4 | 38 | - 6 | - 0 | 23 | 21 | | |
| 20 | -12 | 9 | 11 | 25 | 17 | 6 | - 2 | 26 | -10 | 3 |
| | 13 | 17 | 13 | -18 | 30 | 47 | 24 | 19 | - 6 | |
| 21 | 7 | - 2 | 12 | 7 | 10 | 11 | - 2 | 1 | 12 | -13 |
| | 20 | 13 | 13 | 24 | 7 | 3 | 3 | 3 | 22 | - 1 |
| 22 | - 3 | - 0 | 27 | 17 | 13 | 14 | -18 | - 4 | 1 | -21 |
| | 12 | 12 | 3 | 1 | 8 | 16 | 13 | 18 | 21 | 16 |
| | 23 | | | | | | | | | |
| 23 | 16 | 3 | -13 | 7 | -23 | -14 | 29 | 14 | 18 | 23 |
| | - 2 | - 5 | 32 | 20 | 2 | - 3 | -28 | - 7 | - 9 | -24 |
| | 16 | - 3 | | | | | | | | |
| 24 | 2 | 17 | -13 | 2 | -15 | 1 | 30 | 14 | 8 | 24 |
| | - 1 | 6 | - 2 | - 4 | 10 | - 1 | - 4 | 1 | -19 | 6 |
| | - 5 | - 7 | 11 | | | | | | | |
| 25 | - 6 | 25 | -29 | 7 | -13 | - 4 | 26 | 28 | - 8 | 39 |
| | - 1 | 11 | 2 | -23 | 23 | 18 | - 0 | - 6 | -46 | 37 |
| | -14 | -10 | 1 | 35 | | | | | | |

## Table G6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 13 | 2 | 16 | 9 | 1 | 1 | 8 | 15 | 15 | 3 |
| | 7 | 5 | 19 | -5 | 19 | 29 | -6 | 20 | 3 | 18 |
| | 14 | 19 | 12 | 3 | 5 | | | | | |
| 27 | 4 | -5 | 22 | 2 | 24 | 23 | -28 | -25 | 1 | -36 |
| | 16 | 12 | -19 | 9 | -8 | -10 | 29 | 8 | 35 | -10 |
| | 14 | 28 | -23 | -6 | -25 | -4 | | | | |
| 28 | 7 | 23 | -8 | -12 | -1 | 22 | 7 | -18 | 2 | -1 |
| | -1 | 7 | -36 | 5 | -0 | -11 | 2 | 6 | 4 | -10 |
| | -6 | 5 | -15 | 10 | 5 | -17 | 21 | | | |
| 29 | 3 | 8 | 1 | 7 | 22 | 14 | 0 | 4 | 12 | -11 |
| | 28 | 25 | 5 | 13 | 11 | -1 | 12 | -6 | 12 | 1 |
| | 24 | 11 | 7 | 6 | -2 | 9 | 28 | 8 | | |
| 30 | -5 | -6 | 15 | -0 | 21 | 25 | -34 | -25 | -6 | -29 |
| | 11 | 10 | -28 | -2 | -6 | -12 | 25 | 8 | 19 | 2 |
| | 0 | 20 | -35 | -5 | -18 | -7 | 41 | 23 | 8 | |
| 31 | 6 | 28 | -4 | 6 | -4 | 9 | 14 | 17 | 7 | 11 |
| | 5 | 8 | -1 | -2 | 25 | 24 | -5 | 9 | -4 | 31 |
| | 6 | 6 | -0 | 13 | 31 | 7 | -12 | 13 | 9 | -5 |
| 32 | -1 | 23 | -0 | -2 | -5 | 16 | 11 | 10 | -2 | 7 |
| | 3 | 7 | -13 | -10 | 27 | 20 | 4 | 13 | -13 | 33 |
| | -4 | 3 | -17 | 24 | 30 | 3 | -5 | 22 | -1 | 3 |
| | 37 | | | | | | | | | |
| 33 | -7 | 17 | -37 | -19 | -9 | 9 | 18 | -7 | 4 | 21 |
| | 0 | 7 | -25 | 15 | -10 | -36 | 3 | -23 | -7 | -28 |
| | -7 | -19 | -1 | 28 | 14 | -31 | 10 | 37 | 9 | 11 |
| | 5 | 12 | | | | | | | | |
| 34 | -8 | 5 | -17 | 15 | 28 | 2 | 0 | 13 | -2 | 4 |
| | 13 | 21 | 17 | 8 | 10 | 6 | 24 | -23 | 6 | 22 |
| | 9 | 12 | -4 | 4 | 12 | 10 | -1 | 3 | 20 | -1 |
| | 11 | 7 | 6 | | | | | | | |
| 35 | 18 | 23 | -18 | -7 | -6 | 21 | 12 | -6 | 17 | 2 |
| | 4 | -5 | -20 | 9 | 14 | 7 | -7 | 25 | 17 | 6 |
| | 4 | 19 | -2 | 5 | 3 | 8 | 13 | 22 | 18 | 2 |
| | 24 | 25 | 9 | 6 | | | | | | |
| 36 | 18 | 18 | 3 | -26 | -38 | 9 | 24 | -8 | 19 | 15 |
| | -13 | -19 | -22 | 5 | -4 | -11 | -31 | 16 | -3 | -29 |
| | -3 | -4 | 19 | 13 | 0 | -3 | -0 | 26 | -3 | -5 |
| | 6 | 6 | 26 | -22 | 27 | | | | | |
| 37 | -8 | 12 | -2 | 3 | -20 | -3 | 11 | 18 | -3 | 22 |
| | -6 | -1 | 9 | -12 | 16 | 27 | -6 | 8 | -22 | 29 |
| | -9 | -3 | 9 | 21 | 34 | 12 | -20 | -2 | -14 | -12 |
| | 18 | 21 | -2 | 7 | 7 | 9 | | | | |
| 38 | 19 | -5 | 17 | 4 | -21 | -1 | 10 | 12 | 22 | 4 |
| | 1 | -13 | 24 | 23 | 2 | 7 | -25 | 10 | 10 | -22 |
| | 23 | 13 | 52 | 2 | -17 | 24 | -7 | -13 | 3 | -21 |
| | -6 | -12 | -16 | -8 | 12 | 25 | -3 | | | |

## Table G6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 39 | - 5 | 6 | -30 | 12 | 2 | -16 | 25 | 39 | 8 | 27 |
| | 15 | 14 | 37 | 17 | 18 | 10 | - 5 | -29 | -16 | 13 |
| | 16 | - 1 | 36 | 10 | 25 | 11 | -24 | -19 | 15 | -39 |
| | 14 | - 0 | 4 | 32 | - 3 | - 4 | 13 | 25 | | |
| 40 | 18 | 19 | -13 | -17 | -47 | 19 | 18 | - 7 | 6 | 17 |
| | -16 | -22 | -27 | -15 | 9 | 11 | -26 | 32 | -21 | - 1 |
| | -12 | 7 | 8 | 20 | 21 | 8 | - 9 | 21 | -16 | - 0 |
| | 17 | 27 | 9 | -24 | 27 | 46 | 32 | 18 | -14 | |
| 41 | 4 | 17 | -15 | 4 | 6 | 1 | 20 | 16 | 20 | 18 |
| | 11 | 15 | 11 | 7 | 12 | 1 | - 1 | -14 | - 7 | 12 |
| | 8 | 1 | 9 | 14 | 21 | 10 | - 2 | - 2 | 17 | -19 |
| | 16 | 15 | 7 | 21 | 14 | - 4 | - 0 | 2 | 28 | - 8 |
| 42 | 9 | 6 | 3 | 1 | -10 | - 8 | 20 | 16 | 13 | 12 |
| | 4 | 3 | 21 | - 4 | 14 | 13 | -13 | 4 | - 8 | 7 |
| | 11 | - 0 | 24 | 15 | 13 | 23 | - 7 | -10 | 4 | -12 |
| | 10 | 15 | - 7 | 3 | 4 | 6 | 10 | 21 | 18 | 7 |
| | 24 | | | | | | | | | |
| 43 | - 3 | 6 | - 6 | - 1 | 26 | 19 | -11 | -15 | 10 | -13 |
| | 13 | 12 | -17 | 31 | -13 | -33 | 21 | -19 | 31 | -25 |
| | 14 | 7 | -11 | - 3 | -26 | -15 | 36 | 25 | 18 | 24 |
| | - 4 | - 3 | 35 | 17 | 5 | 3 | -22 | -10 | - 9 | -22 |
| | 14 | -12 | | | | | | | | |
| 44 | 4 | - 6 | -26 | - 0 | 12 | 14 | -22 | -11 | 2 | -23 |
| | 12 | 9 | -11 | 8 | 1 | 4 | 14 | 16 | 24 | 3 |
| | 9 | 19 | -13 | - 3 | -13 | 7 | 30 | 10 | 15 | 27 |
| | - 4 | - 3 | - 6 | - 3 | 4 | - 0 | - 6 | - 4 | -18 | 1 |
| | - 8 | - 4 | 13 | | | | | | | |
| 45 | 9 | 9 | -32 | -13 | -11 | 23 | -14 | -28 | - 2 | -19 |
| | - 8 | -12 | -42 | - 9 | - 4 | 2 | 1 | 37 | 16 | 2 |
| | -10 | 18 | -29 | 2 | -12 | - 4 | 25 | 30 | - 6 | 40 |
| | 1 | 18 | 2 | -25 | 23 | 25 | 3 | -11 | -47 | 37 |
| | -22 | -13 | - 9 | 28 | | | | | | |
| 46 | 10 | 13 | - 0 | - 2 | - 9 | 4 | 12 | - 4 | 18 | 8 |
| | 7 | 8 | - 7 | 10 | 3 | -17 | - 7 | - 4 | - 2 | -21 |
| | 14 | 7 | 22 | 16 | 1 | 0 | 10 | 20 | 15 | 4 |
| | 2 | - 1 | 21 | - 1 | 10 | 19 | - 7 | 18 | 7 | 12 |
| | 13 | 15 | -16 | 5 | 5 | | | | | |
| 47 | - 4 | 1 | - 2 | 14 | 1 | -13 | 11 | 32 | 2 | 10 |
| | 2 | 7 | 33 | - 7 | 14 | 31 | - 8 | 3 | -18 | 31 |
| | 6 | 3 | 15 | 7 | 21 | 25 | -25 | -25 | - 1 | -24 |
| | 15 | 12 | -26 | 9 | - 5 | -11 | 25 | 10 | 29 | - 7 |
| | 21 | 27 | -21 | -15 | -21 | - 6 | | | | |
| 48 | - 3 | -12 | 23 | 19 | 14 | 3 | -11 | 13 | - 3 | -19 |
| | 7 | 5 | 23 | - 7 | 6 | 29 | 10 | 13 | 9 | 24 |
| | 7 | 19 | - 6 | -14 | -12 | 16 | 4 | -16 | 2 | 1 |
| | 1 | 5 | -33 | 5 | - 6 | -11 | - 1 | 9 | 3 | - 4 |
| | - 3 | 9 | -17 | 9 | 2 | -10 | 17 | | | |

## Table G6 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 49 | 1 | 16 | -10 | 7 | 4 | 6 | 18 | 15 | 9 | 11 |
| | 7 | 11 | 6 | - 6 | 22 | 11 | - 1 | - 6 | -15 | 23 |
| | 4 | 4 | 1 | 12 | 27 | 13 | - 8 | 6 | 11 | -13 |
| | 26 | 28 | - 2 | 14 | 11 | - 5 | 11 | - 0 | 15 | 6 |
| | 38 | 19 | 0 | - 7 | - 4 | 14 | 26 | 4 | | |
| 50 | 3 | - 5 | 12 | 19 | - 6 | -17 | 9 | 24 | - 1 | 5 |
| | - 2 | - 3 | 36 | -12 | 18 | 38 | - 6 | 14 | - 8 | 37 |
| | 5 | 8 | -17 | - 2 | 17 | 29 | -26 | -33 | - 8 | -24 |
| | 13 | 9 | -38 | 7 | - 7 | -15 | 19 | 20 | 22 | - 3 |
| | 5 | 28 | -36 | - 4 | -16 | - 7 | 42 | 24 | 9 | |
| 51 | 16 | 5 | 26 | - 4 | - 3 | 15 | - 2 | -11 | 1 | -15 |
| | 4 | -10 | -16 | - 7 | 6 | 13 | - 6 | 23 | 8 | 10 |
| | 1 | 22 | -11 | - 2 | - 6 | 3 | 13 | 16 | 5 | 12 |
| | 5 | 15 | -10 | - 5 | 20 | 20 | 1 | 5 | -13 | 26 |
| | 1 | 3 | - 1 | 21 | 26 | 13 | - 8 | 13 | 8 | - 2 |
| 52 | 11 | - 0 | 31 | - 2 | -14 | 14 | - 2 | - 7 | 5 | - 8 |
| | -10 | -15 | - 9 | -11 | - 1 | 16 | -14 | 28 | 1 | 5 |
| | - 0 | 19 | - 5 | - 7 | - 7 | 20 | 9 | 10 | - 0 | 6 |
| | 1 | 9 | -16 | -14 | 23 | 20 | 4 | 18 | -18 | 34 |
| | - 3 | 7 | -14 | 16 | 29 | 8 | - 0 | 17 | 6 | 9 |
| | 33 | | | | | | | | | |
| 53 | -13 | -17 | 22 | 14 | 37 | 6 | -31 | 2 | -16 | -32 |
| | 12 | 10 | 10 | - 7 | 4 | 27 | 30 | 7 | 18 | 33 |
| | 3 | 18 | -35 | -13 | -18 | 11 | 20 | - 7 | 8 | 21 |
| | - 3 | 5 | -27 | 14 | - 8 | -35 | 1 | -20 | -12 | -25 |
| | - 8 | -13 | 3 | 24 | 19 | -19 | 10 | 35 | 4 | 12 |
| | 14 | 8 | | | | | | | | |
| 54 | -12 | 15 | -15 | 4 | -11 | 18 | 12 | 1 | -10 | 20 |
| | - 4 | 4 | -19 | -23 | 11 | 1 | 6 | - 1 | -28 | 24 |
| | -14 | 5 | -15 | 19 | 41 | - 7 | - 5 | 17 | 1 | 7 |
| | 16 | 27 | -23 | 9 | 12 | 4 | 21 | -24 | 3 | 25 |
| | 14 | 3 | - 5 | - 6 | 14 | 10 | - 1 | - 3 | 25 | - 7 |
| | 9 | 7 | - 6 | | | | | | | |
| 55 | 9 | 1 | 21 | 5 | 1 | 6 | - 0 | 2 | 12 | - 9 |
| | 6 | 2 | 14 | 8 | 14 | 9 | - 3 | 13 | 14 | - 3 |
| | 26 | 22 | -21 | - 7 | -14 | 22 | 8 | - 8 | 15 | - 3 |
| | 1 | - 3 | -18 | - 0 | 14 | 8 | - 6 | 36 | 11 | 1 |
| | 13 | 25 | - 3 | 10 | 1 | 19 | 12 | 22 | 16 | 7 |
| | 14 | 22 | 3 | 2 | | | | | | |
| 56 | 0 | -15 | 26 | 6 | 28 | 8 | -22 | - 3 | 12 | -33 |
| | 16 | 2 | 13 | 18 | - 5 | - 2 | 17 | 6 | 35 | - 9 |
| | 21 | 23 | - 5 | -18 | -39 | 11 | 27 | - 1 | 12 | 21 |
| | -10 | -12 | -14 | 1 | - 4 | - 9 | -22 | 18 | - 7 | -23 |
| | 3 | 8 | 26 | 16 | 3 | 4 | 2 | 25 | - 1 | - 3 |
| | 3 | 7 | 25 | -20 | 31 | | | | | |

## Table G6 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 57 | 6 | 6 | 23 | -10 | -10 | 14 | -8 | -17 | -3 | -9 |
| | -10 | -13 | -18 | 3 | -10 | -9 | -6 | 17 | 15 | -13 |
| | 4 | 12 | -7 | -1 | -17 | -7 | 10 | 17 | -3 | 22 |
| | -4 | 4 | 6 | -14 | 10 | 24 | -2 | 4 | -26 | 21 |
| | -15 | -5 | 11 | 20 | 35 | 9 | -20 | -2 | -9 | -13 |
| | 20 | 17 | -3 | 2 | 10 | 9 | | | | |
| 58 | 8 | 6 | -12 | 2 | 19 | -1 | 7 | 3 | 25 | -0 |
| | 12 | 9 | 9 | 33 | -8 | -28 | 6 | -21 | 28 | -27 |
| | 19 | 1 | 18 | 0 | -21 | -4 | 16 | 10 | 26 | 2 |
| | -2 | -14 | 26 | 23 | 6 | -0 | -17 | 13 | 20 | -27 |
| | 21 | 5 | 47 | 3 | -20 | 24 | -4 | -9 | 11 | -17 |
| | -8 | -12 | -8 | -13 | 14 | 28 | -1 | | | |
| 59 | -9 | 21 | -15 | -7 | 9 | 20 | -2 | -13 | -3 | 3 |
| | 6 | 9 | -31 | 3 | -6 | -20 | 20 | -9 | 0 | 1 |
| | -9 | 3 | -26 | 15 | 13 | -19 | 22 | 38 | 13 | 27 |
| | 11 | 21 | 39 | 15 | 12 | 4 | 1 | -31 | -14 | 6 |
| | 10 | -7 | 35 | 10 | 17 | 13 | -17 | -15 | 16 | -33 |
| | 10 | -4 | 1 | 32 | -11 | 1 | 12 | 22 | | |
| 60 | 19 | -19 | 46 | -1 | 8 | 8 | -26 | -15 | 11 | -38 |
| | 2 | -12 | 7 | 20 | -7 | 3 | 0 | 29 | 41 | -17 |
| | 23 | 25 | 8 | -19 | -49 | 17 | 23 | -7 | 4 | 20 |
| | -20 | -20 | -31 | -14 | 0 | 3 | -19 | 32 | -25 | -3 |
| | -16 | 3 | 9 | 28 | 21 | 4 | -4 | 22 | -12 | 6 |
| | 16 | 18 | 19 | -28 | 31 | 50 | 26 | 16 | -15 | |
| 61 | -6 | 4 | -2 | 1 | 16 | 14 | -6 | -5 | -2 | -5 |
| | 12 | 15 | -13 | -0 | 9 | -3 | 11 | 2 | 3 | 4 |
| | 1 | 10 | -16 | 7 | 6 | -7 | 16 | 22 | 20 | 17 |
| | 6 | 18 | 14 | 6 | 15 | 0 | -6 | -9 | -7 | -1 |
| | 9 | -2 | 20 | 17 | 15 | 14 | -4 | -5 | 15 | -14 |
| | 14 | 4 | 5 | 15 | 15 | 1 | 6 | 7 | 28 | -3 |
| 62 | 4 | 5 | 9 | -6 | 3 | 11 | -8 | -17 | 11 | -7 |
| | 8 | -1 | -15 | 17 | -14 | -25 | 2 | -2 | 17 | -20 |
| | 12 | 5 | 0 | 1 | -12 | -5 | 22 | 10 | 8 | 22 |
| | -2 | 0 | 18 | -6 | 12 | 9 | -20 | 8 | -17 | -1 |
| | 3 | -4 | 28 | 20 | 14 | 22 | -14 | -8 | -1 | -18 |
| | 8 | 14 | -1 | -2 | 10 | 14 | 15 | 19 | 22 | 15 |
| | 25 | | | | | | | | | |
| 63 | -21 | -9 | -12 | 23 | 32 | -10 | -5 | 27 | -10 | 6 |
| | 17 | 23 | -29 | -4 | 18 | 22 | 27 | -21 | -11 | 43 |
| | 2 | 5 | -11 | 2 | 25 | 10 | -5 | -15 | 10 | -6 |
| | 17 | 13 | -12 | 33 | -11 | -38 | 14 | -16 | 28 | -29 |
| | 21 | 7 | -4 | -1 | -25 | -9 | 29 | 17 | 23 | 25 |
| | -12 | -7 | 33 | 11 | -2 | 3 | -20 | -1 | 3 | -18 |
| | 9 | -9 | | | | | | | | |

## Table G6 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 64 | 3 | 10 | -3 | 2 | -7 | -4 | 16 | 15 | 9 | 12 |
| | -9 | -0 | 18 | 11 | 8 | 8 | -13 | -1 | -7 | 1 |
| | 2 | 2 | 26 | 7 | 11 | 10 | -16 | -8 | -9 | -22 |
| | 13 | 8 | -5 | 12 | -1 | 4 | 14 | 21 | 22 | 7 |
| | 11 | 17 | -10 | -8 | -15 | -0 | 17 | 7 | 17 | 22 |
| | -3 | 2 | -5 | -2 | 11 | 4 | -1 | 13 | -7 | 3 |
| | -5 | -8 | 11 | | | | | | | |
| 65 | 12 | -17 | 30 | 7 | -10 | -13 | 1 | 15 | 10 | -5 |
| | 0 | -7 | 38 | 6 | 7 | 26 | -12 | 22 | 10 | 3 |
| | 16 | 15 | 34 | -15 | -16 | 27 | -12 | -28 | -4 | -20 |
| | -2 | -13 | -41 | -5 | -5 | -2 | 3 | 43 | 15 | 4 |
| | -5 | 19 | -25 | 4 | -11 | -3 | 23 | 26 | -8 | 45 |
| | 5 | 18 | 7 | -29 | 24 | 22 | 4 | -3 | -44 | 40 |
| | -18 | -6 | 8 | 25 | | | | | | |
| 66 | 1 | -7 | 15 | 8 | 20 | 7 | -9 | -1 | 6 | -19 |
| | 16 | 4 | 12 | 14 | 7 | -0 | 15 | 1 | 27 | 4 |
| | 15 | 9 | -4 | -5 | -18 | 3 | 15 | -11 | 12 | 12 |
| | -0 | 1 | -6 | 10 | -3 | -18 | -7 | 3 | -1 | -25 |
| | 7 | 12 | 21 | 13 | -1 | 2 | 9 | 9 | 8 | 3 |
| | 3 | -3 | 18 | -7 | 13 | 29 | -2 | 22 | 7 | 22 |
| | 13 | 17 | 17 | 10 | 9 | | | | | |
| 67 | 6 | 14 | -12 | -20 | -12 | 8 | 9 | -19 | 6 | 11 |
| | -11 | -3 | -35 | -2 | -9 | -26 | -10 | -5 | -4 | -24 |
| | -6 | -8 | -5 | 10 | 1 | -16 | 7 | 29 | 3 | 11 |
| | 2 | 9 | 34 | -8 | 20 | 30 | -4 | -6 | -18 | 24 |
| | 4 | -10 | 20 | -1 | 19 | 22 | -25 | -28 | 2 | -31 |
| | 11 | 8 | -25 | 15 | -4 | -11 | 19 | 12 | 28 | -12 |
| | 19 | 28 | -18 | -8 | -23 | -6 | | | | |
| 68 | 9 | 12 | -18 | -12 | -25 | -8 | 30 | -0 | 9 | 23 |
| | -8 | -1 | -6 | 4 | -9 | -10 | -20 | -4 | -15 | -18 |
| | -5 | -12 | 25 | 17 | 15 | 0 | -14 | 13 | -4 | -17 |
| | 5 | 5 | 26 | -4 | 6 | 28 | 12 | 10 | 14 | 24 |
| | 4 | 8 | -3 | -14 | -9 | 15 | -4 | -21 | -0 | -8 |
| | -6 | -5 | -39 | 10 | -0 | -14 | 1 | 16 | 6 | -12 |
| | -2 | 2 | -17 | 11 | 3 | -15 | 25 | | | |
| 69 | 2 | 10 | 13 | -0 | 2 | 13 | 3 | -6 | 6 | -3 |
| | -5 | 2 | -13 | -4 | 6 | 1 | -1 | 14 | 3 | 4 |
| | -1 | 11 | -6 | 9 | --0 | 8 | 4 | 15 | 6 | 5 |
| | 12 | 17 | 5 | -3 | 22 | 13 | -4 | -1 | -11 | 19 |
| | 4 | -6 | 10 | 11 | 22 | 13 | -8 | -1 | 11 | -7 |
| | 16 | 24 | 2 | 15 | 9 | 1 | 9 | 7 | 18 | 5 |
| | 22 | 21 | 4 | 1 | -2 | 7 | 28 | 5 | | |

## Table G6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 | 15 | 12 | - 5 | -20 | -24 | 7 | 12 | -19 | 10 | 7 |
| | - 9 | -12 | -32 | 9 | -15 | -32 | -20 | - 2 | - 2 | -41 |
| | - 1 | - 6 | 11 | 13 | - 4 | -13 | 11 | 29 | 2 | 9 |
| | - 3 | - 0 | 36 | -22 | 18 | 36 | - 8 | 9 | -17 | 31 |
| | - 3 | - 7 | 21 | 8 | 16 | 24 | -27 | -33 | - 5 | -28 |
| | 11 | 6 | -31 | 2 | - 2 | -12 | 24 | 14 | 17 | 0 |
| | 7 | 22 | -30 | - 2 | -16 | - 8 | 37 | 26 | 11 | |
| 71 | 7 | 2 | 16 | 13 | - 5 | 1 | 4 | 2 | 7 | - 5 |
| | 4 | 1 | 13 | 5 | 6 | 10 | - 4 | 11 | 4 | - 3 |
| | 14 | 14 | 15 | 1 | - 6 | 21 | 3 | - 7 | 2 | - 4 |
| | - 1 | - 5 | -13 | - 9 | 1 | 3 | 2 | 20 | 3 | 6 |
| | 2 | 16 | - 9 | 4 | 2 | 6 | 15 | 13 | 8 | 9 |
| | 3 | 14 | - 1 | - 0 | 33 | 17 | 8 | 6 | - 6 | 25 |
| | 10 | 5 | 4 | 17 | 26 | 18 | - 4 | 9 | 18 | - 3 |
| 72 | 15 | 1 | 15 | 3 | - 9 | 3 | 4 | 0 | 16 | -10 |
| | - 4 | - 6 | 9 | 13 | 5 | - 2 | -16 | 15 | 16 | -17 |
| | 18 | 8 | 28 | - 4 | -21 | 13 | 7 | - 6 | 5 | - 6 |
| | - 6 | -14 | - 8 | -11 | 7 | 13 | - 3 | 31 | 4 | 7 |
| | 1 | 19 | 3 | 1 | - 4 | 15 | 3 | 11 | - 1 | 2 |
| | 2 | 9 | - 9 | -15 | 34 | 26 | 8 | 18 | -16 | 33 |
| | - 3 | 3 | -13 | 25 | 28 | 13 | - 2 | 16 | 10 | 5 |
| | 30 | | | | | | | | | |
| 73 | 4 | 11 | -12 | - 6 | -37 | -11 | 28 | 11 | - 5 | 31 |
| | -16 | - 9 | 1 | -22 | 7 | 11 | -27 | 7 | -40 | 3 |
| | -18 | -16 | 21 | 17 | 33 | 5 | -31 | 1 | -23 | -26 |
| | 9 | 13 | 5 | - 9 | - 1 | 18 | 31 | 6 | 6 | 40 |
| | - 1 | 16 | -35 | -20 | - 1 | 5 | 14 | - 9 | 5 | 16 |
| | - 5 | 11 | -26 | 16 | - 6 | -31 | 3 | -18 | - 9 | -24 |
| | -12 | -16 | - 3 | 18 | 16 | -27 | 13 | 37 | 6 | 10 |
| | 9 | 11 | | | | | | | | |
| 74 | 4 | - 5 | 33 | 3 | - 9 | 10 | - 7 | - 9 | 0 | -10 |
| | - 9 | -15 | - 6 | -16 | 1 | 14 | 0 | 34 | 0 | 14 |
| | - 4 | 7 | -11 | - 5 | - 6 | 16 | 7 | - 6 | -13 | 13 |
| | - 5 | 7 | -23 | -20 | 3 | - 1 | 6 | 1 | -31 | 17 |
| | - 8 | 12 | -14 | 18 | 30 | - 5 | 8 | 18 | 4 | 10 |
| | 10 | 25 | 17 | 9 | 13 | 8 | 13 | -18 | 2 | 24 |
| | 7 | 11 | - 2 | 2 | 16 | 14 | - 4 | - 7 | 18 | - 9 |
| | 20 | 14 | 3 | | | | | | | |
| 75 | 4 | 9 | -14 | 0 | - 1 | 1 | 26 | 12 | 23 | 12 |
| | 13 | 2 | 6 | 15 | 5 | -12 | - 8 | -11 | 1 | -10 |
| | 11 | - 2 | 19 | 7 | 0 | 2 | - 3 | 1 | 10 | -11 |
| | 3 | - 1 | 17 | 9 | 19 | 6 | - 9 | 11 | 17 | - 6 |
| | 27 | 17 | 18 | - 7 | -19 | 18 | 7 | -10 | 19 | - 6 |
| | - 2 | - 6 | -20 | 0 | 14 | 15 | - 5 | 35 | 14 | 1 |
| | 16 | 19 | 5 | 17 | 4 | 17 | 17 | 21 | 15 | 9 |
| | 13 | 24 | 5 | 6 | | | | | | |

Table G6 Continued

| Row | Factor | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 76 | -8 | 12 | -32 | 7 | 2 | -17 | 28 | 27 | 3 | 30 |
| | 7 | 15 | 23 | 5 | 18 | 10 | -0 | -30 | -19 | 8 |
| | -2 | -19 | 20 | 15 | 30 | 0 | -21 | -7 | 8 | -31 |
| | 16 | 10 | 15 | 22 | -3 | -5 | 15 | -1 | 41 | -10 |
| | 24 | 19 | 1 | -22 | -37 | 2 | 24 | -8 | 19 | 12 |
| | -20 | -14 | -15 | 9 | -5 | -14 | -21 | 16 | -0 | -34 |
| | 8 | -6 | 31 | 19 | 0 | -1 | 5 | 23 | -0 | -8 |
| | 3 | 6 | 23 | -15 | 25 | | | | | |
| 77 | 4 | -11 | 15 | 15 | -0 | -10 | -2 | 10 | 4 | -2 |
| | -3 | -6 | 29 | -1 | 1 | 10 | -2 | 5 | 1 | 5 |
| | 5 | 6 | 14 | -7 | -12 | 20 | -8 | -26 | -9 | -11 |
| | -6 | -13 | -27 | 1 | -15 | -10 | 3 | 20 | 14 | -10 |
| | -0 | 19 | -8 | -5 | -16 | -4 | 18 | 29 | -0 | 29 |
| | -1 | 6 | 13 | -8 | 16 | 25 | -4 | 7 | -18 | 28 |
| | -18 | -14 | 14 | 22 | 41 | 19 | -28 | -3 | -8 | -16 |
| | 28 | 20 | 5 | 9 | 4 | 5 | | | | |
| 78 | -19 | -1 | -17 | 18 | 37 | -2 | -5 | 17 | -7 | -2 |
| | 16 | 25 | 17 | -6 | 13 | 10 | 29 | -26 | -7 | 33 |
| | 6 | 11 | -19 | 5 | 21 | 4 | 9 | -8 | 18 | 4 |
| | 11 | 10 | 0 | 44 | -6 | -34 | 6 | -28 | 23 | -33 |
| | 21 | 4 | 12 | 2 | -17 | 0 | 20 | 12 | 24 | 9 |
| | -5 | -10 | 30 | 20 | 6 | 6 | -17 | 10 | 19 | -20 |
| | 21 | -4 | 57 | 9 | -14 | 17 | -11 | -13 | 10 | -24 |
| | 1 | -12 | -12 | -4 | 14 | 32 | 7 | | | |
| 79 | -10 | -18 | 26 | 17 | 10 | -1 | -18 | 8 | -16 | -19 |
| | 0 | 3 | 20 | -31 | 12 | 34 | 13 | 22 | -11 | 40 |
| | -6 | 20 | -16 | -11 | 6 | 21 | -1 | -24 | -4 | 4 |
| | -1 | 5 | -42 | 8 | -9 | -25 | 15 | -8 | -8 | 1 |
| | -7 | 8 | -26 | 9 | 8 | -18 | 23 | 40 | 4 | 35 |
| | 14 | 20 | 39 | 12 | 16 | 8 | -4 | -33 | -12 | 12 |
| | 4 | -11 | 35 | 7 | 24 | 10 | -24 | -23 | 9 | -35 |
| | 17 | 1 | 9 | 36 | -10 | -7 | 21 | 32 | | |
| 80 | 7 | 3 | -25 | 8 | -2 | -25 | 29 | 23 | 17 | 25 |
| | 4 | 6 | 36 | 18 | 6 | -5 | -10 | -27 | -7 | -17 |
| | 13 | -17 | 46 | 5 | 6 | 10 | -22 | -24 | 9 | -36 |
| | -0 | -16 | 8 | 18 | -10 | -2 | 0 | 28 | 47 | -19 |
| | 20 | 27 | 1 | -21 | -48 | 14 | 20 | -7 | 9 | 15 |
| | -21 | -15 | -27 | -14 | 12 | 5 | -19 | 34 | -17 | -4 |
| | -10 | 4 | 13 | 27 | 23 | 11 | 1 | 30 | -6 | 2 |
| | 14 | 19 | 16 | -18 | 33 | 46 | 26 | 13 | -10 | |
| 81 | 2 | -2 | 15 | 8 | -10 | 5 | 5 | 8 | -0 | -8 |
| | -3 | -10 | 5 | -9 | 18 | 18 | -7 | 20 | 0 | 20 |
| | 2 | 5 | -4 | 6 | 5 | 8 | -7 | -9 | -8 | -4 |
| | 11 | 14 | -11 | 1 | 13 | -4 | 9 | 8 | -2 | 8 |
| | 7 | 10 | -10 | 1 | 4 | -4 | 17 | 15 | 16 | 11 |
| | 8 | 12 | 15 | 6 | 10 | 1 | -0 | -3 | -3 | 3 |
| | 8 | 6 | 11 | 10 | 15 | 15 | 1 | 2 | 15 | -10 |
| | 20 | 9 | 10 | 26 | 17 | 2 | 9 | 5 | 23 | -2 |

## Table G6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 82 | -6 | -5 | 5 | 12 | 18 | 0 | -12 | 11 | -1 | -12 |
| | 12 | 8 | 21 | 8 | 10 | 11 | 9 | 1 | 7 | 17 |
| | 13 | 9 | 5 | -5 | -6 | 12 | 0 | -19 | 8 | -3 |
| | 4 | -1 | -16 | 15 | -3 | -17 | 3 | 1 | 17 | -18 |
| | 17 | 11 | 4 | 3 | -13 | -6 | 21 | 18 | 15 | 14 |
| | -1 | 2 | 21 | -7 | 17 | 17 | -9 | 12 | -8 | 10 |
| | 3 | 5 | 21 | 20 | 16 | 22 | -15 | -17 | 13 | -23 |
| | 14 | 15 | -13 | 7 | 14 | 6 | 16 | 24 | 19 | 9 |
| | 21 | | | | | | | | | |
| 83 | -1 | 19 | -14 | -16 | -30 | 10 | 20 | -10 | -5 | 24 |
| | -13 | -4 | -35 | -23 | 6 | -7 | -10 | 9 | -30 | 3 |
| | -21 | -11 | -12 | 26 | 35 | -9 | -7 | 24 | -11 | 7 |
| | 14 | 25 | 31 | -14 | 14 | 24 | 22 | -20 | -19 | 43 |
| | 2 | -1 | -10 | -6 | 22 | 14 | -8 | -21 | 10 | -20 |
| | 3 | 9 | -25 | 39 | -13 | -35 | 9 | -16 | 29 | -31 |
| | 15 | 7 | -14 | 1 | -28 | -15 | 35 | 24 | 21 | 22 |
| | 0 | -2 | 38 | 17 | 8 | 4 | -23 | -8 | -6 | -19 |
| | 14 | -12 | | | | | | | | |
| 84 | 4 | 4 | 0 | -4 | -2 | 12 | -1 | -10 | 4 | -5 |
| | -1 | -4 | -19 | 9 | -7 | -17 | 3 | -2 | 2 | -16 |
| | -4 | -2 | -2 | 9 | -2 | -9 | 15 | 18 | 5 | 13 |
| | 6 | 6 | 27 | 5 | 15 | 12 | -10 | -7 | -12 | 8 |
| | -2 | -10 | 24 | 6 | 8 | 17 | -18 | -11 | -4 | -23 |
| | 5 | 5 | -8 | 10 | -2 | 2 | 15 | 16 | 23 | -2 |
| | 5 | 15 | -9 | -0 | -15 | 3 | 25 | 10 | 18 | 23 |
| | -3 | -1 | 0 | -2 | 5 | 1 | -5 | 5 | -15 | -1 |
| | -5 | -7 | 10 | | | | | | | |
| 85 | 6 | 15 | -22 | -15 | -10 | -2 | 17 | -10 | 17 | 14 |
| | -2 | -3 | -11 | 26 | -14 | -37 | -14 | -23 | 7 | -42 |
| | 8 | -16 | 20 | 12 | -5 | -18 | 3 | 19 | 10 | -9 |
| | -6 | -7 | 43 | 2 | 11 | 27 | -9 | 8 | 6 | 2 |
| | 11 | -0 | 32 | -11 | -11 | 26 | -17 | -29 | -4 | -30 |
| | -9 | -11 | -35 | -6 | -0 | 0 | 8 | 42 | 17 | -2 |
| | -2 | 19 | -24 | 9 | -15 | -2 | 27 | 32 | 0 | 41 |
| | 3 | 15 | 4 | -23 | 29 | 18 | -5 | -11 | -48 | 29 |
| | -11 | -12 | 10 | 25 | | | | | | |
| 86 | 1 | 6 | -16 | 7 | -3 | 1 | 15 | 16 | 9 | 14 |
| | 1 | 8 | 8 | -4 | 15 | 5 | -2 | -7 | -19 | 18 |
| | 1 | -6 | 10 | 12 | 24 | 6 | -17 | -5 | 3 | -18 |
| | 10 | 7 | 2 | 12 | 3 | -6 | 10 | -4 | 24 | 1 |
| | 18 | 7 | -5 | -2 | -15 | 9 | 13 | -7 | 16 | 11 |
| | 1 | 3 | 0 | 8 | 3 | -13 | -9 | 2 | 1 | -22 |
| | 9 | 5 | 21 | 13 | 5 | 4 | 11 | 12 | 16 | -2 |
| | 7 | 1 | 18 | -3 | 19 | 23 | -5 | 21 | 9 | 18 |
| | 21 | 17 | 13 | 6 | 5 | | | | | |

## Table G6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 87 | -8 | -22 | 30 | 18 | 29 | 2 | -30 | 0 | -5 | -36 |
| | 14 | 3 | 22 | -0 | 5 | 22 | 23 | 11 | 20 | 22 |
| | 12 | 27 | -16 | -17 | -19 | 13 | 15 | -18 | 3 | 15 |
| | -6 | -4 | -34 | 8 | -8 | -28 | -4 | -1 | -6 | -24 |
| | -2 | 3 | 0 | 19 | 3 | -13 | 14 | 37 | -2 | 19 |
| | 11 | 4 | 43 | -12 | 21 | 35 | -1 | -2 | -12 | 35 |
| | 2 | -4 | 26 | -1 | 26 | 30 | -31 | -28 | 0 | -31 |
| | 17 | 8 | -27 | 17 | -7 | -13 | 31 | 20 | 34 | -12 |
| | 16 | 30 | -30 | -7 | -28 | -3 | | | | |
| 88 | -10 | -9 | 15 | 1 | 26 | 12 | -26 | -15 | 0 | -22 |
| | 5 | 1 | -6 | 14 | -7 | -13 | 19 | -6 | 27 | -8 |
| | 9 | 16 | -20 | -12 | -30 | -9 | 30 | 7 | 13 | 21 |
| | -8 | -6 | -3 | 2 | -2 | -9 | -25 | -2 | -19 | -20 |
| | -2 | -12 | 29 | 20 | 13 | 3 | -12 | 15 | -6 | -17 |
| | 8 | 6 | 25 | -3 | 19 | 29 | 9 | 18 | 14 | 28 |
| | 11 | 21 | -2 | -6 | -4 | 23 | 6 | -16 | 6 | 0 |
| | 3 | 4 | -34 | 7 | 4 | -14 | 5 | 11 | 5 | -8 |
| | -1 | 5 | -20 | 9 | 5 | -10 | 17 | | | |
| 89 | 5 | -1 | 12 | 7 | -2 | 5 | 3 | 2 | 12 | -10 |
| | -2 | -5 | 6 | 4 | 6 | 12 | -2 | 11 | 6 | 2 |
| | 10 | 12 | 14 | -6 | -8 | 15 | -1 | -9 | -0 | -10 |
| | 3 | 1 | -12 | -5 | 7 | 6 | 1 | 17 | -1 | 3 |
| | 4 | 12 | -1 | 0 | 1 | 11 | 9 | 15 | 4 | 11 |
| | 4 | 14 | 4 | -1 | 31 | 17 | 2 | 7 | -10 | 23 |
| | 3 | 1 | 5 | 16 | 25 | 15 | -3 | -0 | 17 | -9 |
| | 33 | 27 | 5 | 15 | 15 | 6 | 21 | 5 | 15 | 7 |
| | 25 | 18 | -1 | 1 | 3 | 15 | 26 | 10 | | |
| 90 | -3 | -20 | 23 | 14 | 29 | -1 | -30 | 7 | -6 | -36 |
| | 13 | 6 | 22 | 11 | 0 | 14 | 18 | 5 | 22 | 15 |
| | 18 | 18 | -6 | -23 | -25 | 15 | 13 | -19 | 5 | 7 |
| | -8 | -9 | -30 | 10 | -13 | -30 | -14 | 6 | 4 | -30 |
| | -2 | -3 | 8 | 15 | -3 | -10 | 16 | 31 | -4 | 22 |
| | -1 | 0 | 41 | -21 | 15 | 38 | -1 | 8 | -9 | 37 |
| | -3 | -4 | 20 | 8 | 27 | 33 | -34 | -30 | -3 | -24 |
| | 14 | 7 | -32 | 5 | -6 | -17 | 32 | 21 | 24 | -6 |
| | 9 | 33 | -43 | -4 | -23 | -9 | 52 | 20 | 12 | |
| 91 | 1 | 4 | -9 | 4 | 4 | 3 | 5 | 6 | 17 | 4 |
| | 8 | 9 | 4 | 21 | 2 | -14 | -2 | -10 | 9 | -13 |
| | 15 | -1 | 13 | 1 | -6 | -0 | -1 | 1 | 7 | -3 |
| | 1 | -4 | 15 | 5 | 1 | 5 | -6 | 13 | 10 | -5 |
| | 10 | 8 | 26 | -3 | -14 | 22 | 1 | -5 | 11 | -11 |
| | -4 | -6 | -8 | -6 | 13 | 11 | -2 | 32 | 11 | 7 |
| | 8 | 29 | 5 | 9 | 2 | 14 | 17 | 13 | 15 | 6 |
| | 11 | 16 | -2 | -4 | 34 | 16 | -3 | 8 | -12 | 26 |
| | 9 | 7 | 1 | 12 | 30 | 14 | -2 | 9 | 16 | -4 |

Table G6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 92 | 3 | - 2 | - 9 | 3 | 15 | 0 | 4 | 4 | 16 | 0 |
| | 7 | 6 | 11 | 28 | - 3 | -18 | 0 | -18 | 17 | -20 |
| | 14 | - 5 | 16 | 1 | -18 | - 3 | 7 | - 5 | 14 | - 6 |
| | - 3 | -14 | 12 | 13 | 1 | - 1 | -15 | 10 | 15 | -24 |
| | 14 | 6 | 28 | - 3 | -19 | 13 | 4 | - 3 | 2 | - 9 |
| | - 7 | -10 | - 4 | -16 | 6 | 18 | - 6 | 44 | 9 | 12 |
| | 5 | 24 | 1 | 8 | 0 | 21 | 4 | 10 | 6 | 6 |
| | 7 | 11 | -15 | - 8 | 32 | 19 | 9 | 16 | -14 | 38 |
| | 3 | 7 | -17 | 15 | 29 | 9 | - 2 | 18 | 10 | 6 |
| | 36 | | | | | | | | | |
| 93 | 9 | - 5 | 29 | -12 | 0 | 13 | -26 | -33 | 0 | -28 |
| | - 8 | -12 | -25 | 10 | -15 | -20 | - 0 | 17 | 29 | -26 |
| | 3 | 14 | -17 | - 6 | -36 | - 8 | 34 | 18 | 3 | 33 |
| | -15 | - 7 | 5 | -19 | 8 | 14 | -18 | 5 | -42 | 10 |
| | -22 | -15 | 25 | 23 | 35 | 11 | -29 | 5 | -20 | -29 |
| | 15 | 13 | 9 | -10 | 12 | 25 | 27 | 12 | 13 | 40 |
| | 4 | 24 | -32 | -11 | - 5 | 14 | 16 | - 4 | 10 | 27 |
| | 4 | 13 | -16 | 15 | -11 | -37 | 0 | -18 | - 8 | -28 |
| | - 9 | - 8 | 1 | 23 | 18 | -19 | 9 | 39 | 5 | 11 |
| | 5 | 2 | | | | | | | | |
| 94 | 7 | - 7 | 14 | - 3 | -23 | - 3 | 6 | 2 | 10 | - 1 |
| | - 6 | -13 | 7 | 7 | - 4 | - 0 | -16 | 8 | 2 | -19 |
| | 4 | - 3 | 32 | 2 | -12 | 10 | - 8 | -15 | - 4 | -12 |
| | - 8 | - 9 | - 8 | -16 | - 0 | 15 | 1 | 31 | - 4 | 13 |
| | - 8 | 11 | -11 | 6 | 1 | 11 | 2 | 8 | - 7 | 17 |
| | - 1 | 19 | - 9 | -20 | 12 | 5 | 6 | - 1 | -26 | 20 |
| | - 1 | 17 | -15 | 15 | 36 | - 1 | 3 | 12 | 9 | 8 |
| | 19 | 21 | 20 | 11 | 7 | 3 | 13 | -17 | 8 | 25 |
| | 12 | 7 | - 4 | 0 | 9 | 14 | 2 | - 1 | 22 | - 2 |
| | 12 | 4 | 5 | | | | | | | |
| 95 | - 4 | - 0 | 1 | 1 | 21 | 7 | -13 | - 2 | 6 | -14 |
| | 12 | 8 | 0 | 8 | 4 | - 4 | 15 | - 6 | 15 | 6 |
| | 12 | 11 | -12 | - 2 | - 4 | 0 | 17 | 5 | 19 | 11 |
| | 5 | 2 | 7 | 16 | 9 | -12 | -12 | - 9 | - 3 | -19 |
| | 9 | - 0 | 19 | 7 | 1 | 12 | - 3 | 1 | 12 | - 6 |
| | 7 | 3 | 12 | 5 | 10 | 10 | - 3 | 16 | 20 | 6 |
| | 27 | 23 | 18 | - 6 | -11 | 19 | 11 | - 2 | 19 | - 7 |
| | 6 | - 2 | -19 | 7 | 20 | 9 | - 6 | 33 | 14 | 7 |
| | 11 | 13 | - 4 | 7 | 6 | 9 | 14 | 21 | 12 | 5 |
| | 26 | 23 | 0 | 11 | | | | | | |
| 96 | -10 | 7 | - 1 | -13 | 15 | 21 | -17 | -18 | - 6 | -11 |
| | 7 | 6 | -31 | - 1 | - 2 | -14 | 17 | - 8 | 4 | 3 |
| | - 5 | 8 | -37 | 4 | 0 | -21 | 24 | 34 | 7 | 34 |
| | 4 | 18 | 24 | 4 | 8 | 2 | - 7 | -31 | -26 | 5 |
| | - 3 | -15 | 27 | 17 | 29 | 7 | -21 | - 5 | 6 | -32 |
| | 13 | 3 | 11 | 24 | - 4 | 3 | 15 | 3 | 41 | - 7 |
| | 23 | 13 | - 1 | -18 | -38 | 3 | 24 | - 6 | 13 | 15 |
| | -16 | -20 | -18 | - 3 | - 4 | -11 | -27 | 15 | - 8 | -32 |
| | - 9 | - 5 | 16 | 17 | 7 | - 8 | 4 | 26 | -13 | - 5 |
| | - 0 | - 2 | 24 | -14 | 21 | | | | | |

Table G6 Continued

Factor

| Row | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 97 | - 1 | 13 | -18 | - 4 | - 4 | - 5 | 13 | 2 | 8 | 22 |
| | 1 | 7 | - 0 | 12 | - 5 | -22 | 0 | -19 | - 7 | -21 |
| | - 1 | -11 | 11 | 17 | 12 | - 5 | - 4 | 6 | 3 | - 8 |
| | - 0 | - 1 | 33 | 10 | - 2 | 12 | - 0 | 1 | 12 | 2 |
| | 5 | 5 | 19 | - 6 | -16 | 16 | - 5 | -22 | - 6 | -17 |
| | -15 | -16 | -23 | 5 | - 6 | - 3 | 0 | 22 | 10 | -13 |
| | 4 | 14 | 1 | 9 | -15 | - 1 | 13 | 31 | - 1 | 24 |
| | - 2 | 3 | 8 | -14 | 14 | 27 | - 2 | 4 | -25 | 29 |
| | - 9 | -15 | 11 | 19 | 34 | 4 | -24 | - 0 | - 5 | -16 |
| | 26 | 23 | 1 | 3 | 4 | 4 | | | | |
| 98 | - 8 | 15 | - 7 | - 2 | -15 | 9 | 11 | 2 | - 7 | 17 |
| | - 4 | - 1 | -25 | -26 | 3 | 9 | - 2 | 13 | -28 | 24 |
| | -19 | 1 | -21 | 21 | 38 | - 1 | - 5 | 13 | - 7 | 0 |
| | 23 | 30 | 13 | - 9 | 12 | 5 | 19 | -25 | -13 | 31 |
| | 11 | 2 | -12 | 2 | 22 | 4 | 2 | - 8 | 18 | - 4 |
| | 11 | 12 | 0 | 43 | - 9 | -24 | - 1 | -22 | 25 | -30 |
| | 18 | 2 | 7 | - 0 | -23 | - 5 | 14 | 10 | 23 | 7 |
| | 1 | -13 | 22 | 21 | 4 | - 0 | -15 | 10 | 13 | -23 |
| | 27 | - 0 | 48 | 5 | - 6 | 20 | - 5 | -11 | 6 | -19 |
| | - 3 | -15 | - 8 | - 5 | 11 | 17 | 1 | | | |
| 99 | 11 | 12 | - 4 | -11 | -47 | 2 | 28 | - 3 | 9 | 24 |
| | -17 | -20 | -13 | - 3 | - 7 | - 9 | -30 | 11 | -24 | -23 |
| | - 8 | -15 | 27 | 18 | 13 | - 4 | -14 | 5 | -14 | -14 |
| | - 0 | 3 | 21 | -33 | 10 | 35 | 16 | 17 | - 8 | 44 |
| | - 5 | 13 | -14 | -10 | 9 | 16 | - 5 | -20 | 0 | - 6 |
| | - 1 | 9 | -40 | 13 | - 3 | -23 | 16 | - 7 | - 4 | - 6 |
| | - 7 | 4 | -29 | 11 | 6 | -16 | 22 | 36 | 9 | 32 |
| | 13 | 14 | 42 | 13 | 12 | 2 | - 7 | -32 | -13 | 12 |
| | 14 | -14 | 41 | 8 | 24 | 10 | -29 | -24 | 14 | -34 |
| | 8 | - 4 | 4 | 31 | -10 | -10 | 15 | 26 | | |
| 100 | -11 | 7 | -23 | - 0 | 27 | 13 | - 9 | -10 | 0 | - 3 |
| | 15 | 21 | -23 | 10 | - 8 | -31 | 26 | -30 | 5 | - 8 |
| | 2 | 1 | -25 | 14 | 5 | -28 | 26 | 29 | 23 | 28 |
| | 1 | 7 | 41 | 24 | 5 | - 3 | -13 | -29 | 0 | -19 |
| | 12 | -15 | 41 | 10 | 3 | 17 | -20 | -19 | 7 | -35 |
| | 1 | -15 | 8 | 24 | -10 | 2 | - 0 | 28 | 44 | -20 |
| | 26 | 23 | 6 | -13 | -48 | 12 | 21 | - 3 | 7 | 22 |
| | -16 | -22 | -28 | -19 | 9 | 3 | -23 | 32 | -25 | - 6 |
| | -12 | 5 | 9 | 24 | 25 | 7 | - 5 | 24 | -12 | - 0 |
| | 17 | 22 | 14 | -21 | 25 | 45 | 24 | 12 | -12 | |

Table 67

Means and Standard
Deviations on 300 FPS
Items for 742 Faculty Members

| Item | Mean | S.D. | Item | Mean | S.D. | Item | Mean | S.D. |
|---|---|---|---|---|---|---|---|---|
| 1 | 2.3 | 1.2 | 44 | 2.7 | 1.4 | 87 | 1.8 | .9 |
| 2 | 1.9 | 1.0 | 45 | 1.7 | .9 | 88 | 2.3 | 1.1 |
| 3 | 1.8 | 1.0 | 46 | 2.1 | 1.0 | 89 | 2.3 | 1.3 |
| 4 | 2.8 | 1.4 | 47 | 2.4 | 1.3 | 90 | 3.1 | 1.4 |
| 5 | 2.5 | 1.3 | 48 | 2.7 | 1.3 | 91 | 2.4 | 1.2 |
| 6 | 2.0 | 1.1 | 49 | 3.2 | 1.4 | 92 | 1.9 | .9 |
| 7 | 2.0 | 1.2 | 50 | 2.9 | 1.4 | 93 | 2.1 | 1.1 |
| 8 | 2.8 | 1.4 | 51 | 3.3 | 1.3 | 94 | 2.3 | 1.4 |
| 9 | 2.5 | 1.4 | 52 | 3.0 | 1.5 | 95 | 2.7 | 1.5 |
| 10 | 2.6 | 1.2 | 53 | 2.4 | 1.3 | 96 | 2.2 | 1.2 |
| 11 | 2.4 | 1.2 | 54 | 2.2 | 1.1 | 97 | 2.2 | 1.1 |
| 12 | 2.6 | 1.2 | 55 | 1.8 | .9 | 98 | 2.3 | 1.2 |
| 13 | 2.2 | 1.1 | 56 | 2.4 | 1.1 | 99 | 3.3 | 1.5 |
| 14 | 2.3 | 1.2 | 57 | 2.5 | 1.3 | 100 | 2.3 | 1.4 |
| 15 | 2.5 | 1.4 | 58 | 2.5 | 1.4 | 101 | 1.9 | 1.0 |
| 16 | 2.0 | 1.1 | 59 | 2.3 | 1.2 | 102 | 2.4 | 1.3 |
| 17 | 2.1 | 1.1 | 60 | 2.8 | 1.5 | 103 | 2.3 | 1.2 |
| 18 | 2.0 | 1.1 | 61 | 2.3 | 1.2 | 104 | 2.8 | 1.4 |
| 19 | 2.6 | 1.3 | 62 | 2.0 | 1.1 | 105 | 1.6 | .8 |
| 20 | 2.1 | 1.1 | 63 | 1.8 | 1.0 | 106 | 2.2 | 1.0 |
| 21 | 2.4 | 1.3 | 64 | 2.8 | 1.3 | 107 | 2.4 | 1.3 |
| 22 | 2.3 | 1.3 | 65 | 2.4 | 1.3 | 108 | 2.7 | 1.3 |
| 23 | 2.2 | 1.2 | 66 | 2.0 | 1.1 | 109 | 3.1 | 1.4 |
| 24 | 2.8 | 1.2 | 67 | 1.9 | 1.2 | 110 | 2.8 | 1.5 |
| 25 | 2.4 | 1.4 | 68 | 2.9 | 1.5 | 111 | 3.3 | 1.3 |
| 26 | 2.5 | 1.3 | 69 | 2.5 | 1.4 | 112 | 3.0 | 1.4 |
| 27 | 1.8 | .9 | 70 | 2.6 | 1.2 | 113 | 2.5 | 1.3 |
| 28 | 2.3 | 1.1 | 71 | 2.3 | 1.2 | 114 | 2.2 | 1.1 |
| 29 | 2.4 | 1.3 | 72 | 2.6 | 1.2 | 115 | 1.8 | .9 |
| 30 | 3.0 | 1.5 | 73 | 2.2 | 1.1 | 116 | 2.3 | 1.1 |
| 31 | 2.4 | 1.2 | 74 | 2.2 | 1.2 | 117 | 2.5 | 1.3 |
| 32 | 2.0 | 1.0 | 75 | 2.6 | 1.4 | 118 | 2.6 | 1.3 |
| 33 | 2.1 | 1.0 | 76 | 2.0 | 1.0 | 119 | 2.2 | 1.2 |
| 34 | 2.4 | 1.3 | 77 | 2.2 | 1.2 | 120 | 2.8 | 1.4 |
| 35 | 2.7 | 1.4 | 78 | 2.0 | 1.1 | 121 | 2.2 | 1.3 |
| 36 | 2.2 | 1.1 | 79 | 2.7 | 1.3 | 122 | 2.1 | 1.1 |
| 37 | 2.2 | 1.1 | 80 | 2.2 | 1.1 | 123 | 1.8 | 1.0 |
| 38 | 2.3 | 1.2 | 81 | 2.3 | 1.3 | 124 | 2.8 | 1.4 |
| 39 | 3.5 | 1.5 | 82 | 2.4 | 1.4 | 125 | 2.4 | 1.3 |
| 40 | 2.4 | 1.4 | 83 | 2.3 | 1.2 | 126 | 2.0 | 1.1 |
| 41 | 1.9 | 1.0 | 84 | 2.8 | 1.3 | 127 | 2.0 | 1.2 |
| 42 | 2.4 | 1.2 | 85 | 2.4 | 1.4 | 128 | 2.9 | 1.4 |
| 43 | 2.4 | 1.2 | 86 | 2.3 | 1.3 | 129 | 2.5 | 1.4 |

Table G7 Continued

| Item | Mean | S.D. | Item | Mean | S.D. | Item | Mean | S.D. |
|---|---|---|---|---|---|---|---|---|
| 130 | 2.6 | 1.2 | 179 | 2.2 | 1.2 | 228 | 2.7 | 1.3 |
| 131 | 2.4 | 1.2 | 180 | 2.8 | 1.5 | 229 | 3.1 | 1.4 |
| 132 | 2.6 | 1.2 | 181 | 2.3 | 1.3 | 230 | 2.8 | 1.4 |
| 133 | 2.3 | 1.2 | 182 | 2.0 | 1.1 | 231 | 3.2 | 1.3 |
| 134 | 2.2 | 1.3 | 183 | 1.7 | .9 | 232 | 3.0 | 1.5 |
| 135 | 2.6 | 1.4 | 184 | 2.8 | 1.5 | 233 | 2.5 | 1.3 |
| 136 | 2.0 | 1.0 | 185 | 2.5 | 1.3 | 234 | 2.2 | 1.2 |
| 137 | 2.2 | 1.2 | 186 | 2.0 | 1.1 | 235 | 1.8 | .9 |
| 138 | 2.0 | 1.1 | 187 | 1.9 | 1.1 | 236 | 2.4 | 1.1 |
| 139 | 2.6 | 1.3 | 188 | 2.9 | 1.5 | 237 | 2.6 | 1.3 |
| 140 | 2.1 | 1.1 | 189 | 2.5 | 1.4 | 238 | 2.5 | 1.4 |
| 141 | 2.3 | 1.3 | 190 | 2.5 | 1.2 | 239 | 2.2 | 1.2 |
| 142 | 2.3 | 1.4 | 191 | 2.4 | 1.1 | 240 | 2.7 | 1.5 |
| 143 | 2.3 | 1.2 | 192 | 2.7 | 1.2 | 241 | 2.3 | 1.2 |
| 144 | 2.9 | 1.2 | 193 | 2.3 | 1.2 | 242 | 2.0 | 1.1 |
| 145 | 2.4 | 1.4 | 194 | 2.2 | 1.2 | 243 | 1.8 | 1.0 |
| 146 | 2.5 | 1.4 | 195 | 2.6 | 1.4 | 244 | 2.8 | 1.5 |
| 147 | 1.8 | 1.0 | 196 | 2.0 | 1.0 | 245 | 2.5 | 1.3 |
| 148 | 2.4 | 1.1 | 197 | 2.1 | 1.2 | 246 | 2.1 | 1.2 |
| 149 | 2.3 | 1.2 | 198 | 2.0 | 1.1 | 247 | 1.9 | 1.1 |
| 150 | 3.0 | 1.5 | 199 | 2.6 | 1.3 | 248 | 2.9 | 1.4 |
| 151 | 2.4 | 1.2 | 200 | 2.1 | 1.1 | 249 | 2.5 | 1.4 |
| 152 | 1.9 | .9 | 201 | 2.2 | 1.3 | 250 | 2.6 | 1.2 |
| 153 | 2.1 | 1.1 | 202 | 2.3 | 1.3 | 251 | 2.4 | 1.2 |
| 154 | 2.4 | 1.4 | 203 | 2.2 | 1.2 | 252 | 2.6 | 1.2 |
| 155 | 2.7 | 1.4 | 204 | 2.9 | 1.3 | 253 | 2.3 | 1.1 |
| 156 | 2.3 | 1.2 | 205 | 2.4 | 1.4 | 254 | 2.3 | 1.3 |
| 157 | 2.2 | 1.2 | 206 | 2.5 | 1.4 | 255 | 2.6 | 1.4 |
| 158 | 2.4 | 1.2 | 207 | 1.8 | 1.0 | 256 | 2.0 | 1.0 |
| 159 | 3.4 | 1.4 | 208 | 2.3 | 1.1 | 257 | 2.1 | 1.1 |
| 160 | 2.3 | 1.4 | 209 | 2.3 | 1.2 | 258 | 1.9 | 1.1 |
| 161 | 1.8 | .9 | 210 | 3.0 | 1.4 | 259 | 2.6 | 1.3 |
| 162 | 2.5 | 1.2 | 211 | 2.4 | 1.2 | 260 | 2.1 | 1.1 |
| 163 | 2.3 | 1.2 | 212 | 2.0 | 1.0 | 261 | 2.4 | 1.3 |
| 164 | 2.7 | 1.4 | 213 | 2.0 | 1.1 | 262 | 2.3 | 1.3 |
| 165 | 1.7 | .9 | 214 | 2.4 | 1.4 | 263 | 2.3 | 1.2 |
| 166 | 2.1 | 1.1 | 215 | 2.7 | 1.5 | 264 | 2.9 | 1.2 |
| 167 | 2.4 | 1.3 | 216 | 2.2 | 1.2 | 265 | 2.4 | 1.3 |
| 168 | 2.7 | 1.3 | 217 | 2.2 | 1.1 | 266 | 2.5 | 1.4 |
| 169 | 3.2 | 1.4 | 218 | 2.3 | 1.2 | 267 | 2.9 | 1.0 |
| 170 | 2.8 | 1.5 | 219 | 3.3 | 1.5 | 268 | 2.4 | 1.1 |
| 171 | 3.2 | 1.3 | 220 | 2.2 | 1.4 | 269 | 2.3 | 1.2 |
| 172 | 2.9 | 1.5 | 221 | 1.9 | 1.0 | 270 | 3.0 | 1.4 |
| 173 | 2.5 | 1.3 | 222 | 2.5 | 1.3 | 271 | 2.5 | 1.2 |
| 174 | 3.2 | 1.2 | 223 | 2.3 | 1.2 | 272 | 2.0 | 1.0 |
| 175 | 1.8 | .9 | 224 | 2.7 | 1.5 | 273 | 2.0 | 1.1 |
| 176 | 2.4 | 1.1 | 225 | 1.7 | .9 | 274 | 2.4 | 1.4 |
| 177 | 2.6 | 1.4 | 226 | 2.2 | 1.1 | 275 | 2.7 | 1.5 |
| 178 | 2.5 | 1.3 | 227 | 2.4 | 1.3 | 276 | 2.2 | 1.2 |

## Table C7 Continued

| Item | Mean | S.D. | Item | Mean | S.D. | Item | Mean | S.D. |
|---|---|---|---|---|---|---|---|---|
| 277 | 2.2 | 1.1 | | | | | | |
| 278 | 2.4 | 1.2 | | | | | | |
| 279 | 3.3 | 1.4 | | | | | | |
| 280 | 2.3 | 1.4 | | | | | | |
| 281 | 1.9 | 1.0 | | | | | | |
| 282 | 2.4 | 1.2 | | | | | | |
| 283 | 2.3 | 1.2 | | | | | | |
| 284 | 2.8 | 1.4 | | | | | | |
| 285 | 1.7 | .9 | | | | | | |
| 286 | 2.2 | 1.0 | | | | | | |
| 287 | 2.5 | 1.3 | | | | | | |
| 288 | 2.7 | 1.3 | | | | | | |
| 289 | 3.2 | 1.3 | | | | | | |
| 290 | 2.8 | 1.4 | | | | | | |
| 291 | 3.2 | 1.3 | | | | | | |
| 292 | 3.0 | 1.4 | | | | | | |
| 293 | 2.5 | 1.3 | | | | | | |
| 294 | 2.2 | 1.1 | | | | | | |
| 295 | 2.8 | .9 | | | | | | |
| 296 | 2.4 | 1.1 | | | | | | |
| 297 | 2.5 | 1.3 | | | | | | |
| 298 | 2.6 | 1.3 | | | | | | |
| 299 | 2.3 | 1.2 | | | | | | |
| 300 | 2.7 | 1.4 | | | | | | |

# Appendix H

## Principal Component-Varimax Analyses of James and Miner Data

This appendix reports principal component analyses, with varimax rotation of selected variables from correlation matrices reported by H. Thomas James (1963) and Jerry Miner (1963). Discussion of these tables will be found in Chapter II in the section describing community variables.

## Table H1

### Principal Component-Varimax Analysis of Data from Miner (1963)

| Variables | I | II | III |
|---|---|---|---|
| 1. Median family income | 78 | -06 | 13 |
| 2. Percent families with income ≥ $10,000 | 78 | -03 | 18 |
| 3. Statewide equalized value of property per capita | 71 | 14 | 00 |
| 4. Percent of population under 19 years of age | -35 | 51 | -21 |
| 5. Percent of children in private schools | 52 | -41 | 32 |
| 6. Median years of education | 69 | 05 | 03 |
| 7. Percent non-white population | -73 | 19 | 11 |
| 8. Percent in district ≤ 5 years | 43 | 61 | -12 |
| 9. Population per square mile | 21 | -24 | 76 |
| 10. Average daily attendance | -08 | 12 | 84 |
| 11. Percent pupils in secondary grades | 01 | -65 | -09 |

## Table H2

## Principal Component-Varimax Analysis of Data from James (1963)

| Variables | Factor<br>I | II | III | IV | V | VI |
|---|---|---|---|---|---|---|
| 1. Town population | -01 | 01 | 14 | -04 | -09 | 78 |
| 2. Median years schooling for adult population | -43 | -12 | 42 | -19 | -33 | -10 |
| 3. Percent unemployed in civilian labor force | 86 | -08 | 04 | -06 | 02 | -09 |
| 4. Percent civilian labor force employed in manufacturing | -05 | 80 | 10 | -00 | 05 | -05 |
| 5. Median family income | -41 | 24 | 73 | -07 | -27 | -08 |
| 6. Miles to nearest city of 100,000 or more | 15 | -61 | -17 | -14 | -05 | -41 |
| 7. Percent population on rural farms | -13 | -20 | -74 | -07 | -13 | -25 |
| 8. Percent children in private schools | 09 | 44 | 54 | -21 | -06 | -06 |
| 9. Percent population residing in state of birth | -09 | 48 | -67 | -11 | 05 | -01 |
| 10. Percent employed in white collar jobs | -04 | 08 | 91 | 00 | -21 | 22 |
| 11. Percent owner occupied homes | -36 | 39 | 40 | -03 | -15 | -08 |
| 12. Quality of housing | 25 | -06 | -12 | 23 | 71 | -16 |
| 13. Average daily percent of of absenteeism | -18 | -11 | -10 | -09 | 75 | 29 |
| 14. Rate of delinquency | -15 | -31 | 20 | 63 | -03 | -15 |
| 15. Droupouts after 10th grade | 11 | 23 | -18 | 80 | 07 | 10 |
| 16. Percent males in senior class going to college | -11 | -20 | 04 | -66 | -67 | 22 |

# Appendix I

## Instrumentation and Data Collection

The fine sections of this appendix reproduce the fine data collection instruments and the instructions that accompanied the Faculty Preference Scales (FPS), Junior College Environment Scales (JCES) and Student Preference Scales (SPS).

1. The three instruments used to secure information from students and faculty members at each college used a basic set of 300 items. The instrument administered to faculty members consisted of only the 300 items and is reproduced below.

## FACULTY PREFERENCE SCALES

People don't all like the same things about a junior college. What one person prefers another may dislike strongly. These preferences can affect the atmosphere of a college a great deal. Therefore, an adequate description of a junior college should include information about the preferences held by people at that college.

The statements in this booklet describe policies, practices, facilities, activities, and conditions which may or may not exist in any particular junior college. You are being asked to indicate your preference for each item. It makes no difference whether the statement is true or not true for your college. In responding to each item, you are asked to imagine that you hold an appointment in an institution for which the statement is true. (you need not have any particular institution in mind.) Then, on the answer sheet provided, you are to indicate the extent to which you would prefer or not prefer to be in such an institution.

For each item, blacken the appropriate space on the answer sheet, using the following code:

1. I would definitely prefer and would enjoy immensely a junior college characterized by this statement.
2. I would prefer and would be comfortable in a junior college characterized by this statement, but it is not essential for me.
3. This statement does not affect me at all. If true of a junior college, it would make me neither comfortable nor uncomfortable and would neither be preferred nor unpreferred.
4. I would not prefer and would be somewhat uncomfortable in a junior college characterized by this statement, but it could be tolerated.
5. I would definitely not prefer and would be extremely uncomfortable in a junior college characterized by this statement.

Fill in the answer sheet with ordinary pencil; please do not use ink.

There are 300 statements in this booklet, arranged in three sections. Please be sure to answer every item. DO NOT WRITE IN THIS BOOKLET. DO NOT PUT YOUR NAME ON YOUR ANSWER SHEET; all answers are to remain anonymous.

After you have finished, place the answer sheet and item booklet in the envelope provided and seal it. Complete anonymity will thus be maintained. Return the sealed envelope as directed by the person who gave these materials to you.

## PART I

### Section I. The Institution as a Whole

Statements 1-100 refer to the college in general. The statements are about rules and regulations, procedures and policies, facilities and services, and special or general features.

1. Students quickly learn what is done and not done on this campus.
2. There is a well-organized and effective job placement office for the graduating students.
3. Athletic facilities are modern and well-equipped.
4. Anyone who knows the right people in the faculty or administration can get a better break here.
5. Campus buildings are clearly marked by signs and directories.
6. Student organizations are closely supervised to guard against mistakes.
7. There are good facilities for learning vocationally useful skills and techniques.
8. There is a lot of apple-polishing around here.
9. Everyone has a lot of fun at this school.
10. Most people are aware of the financial status of students' families.
11. The library is well supplied with periodicals and books in the social sciences.
12. Students are allowed to help themselves to books in the library stacks.
13. Classes always meet, regardless of any conflicting student event or celebration.
14. Intellectually, this place is a lot different from high school.
15. The library is one of the outstanding facilities on the campus.
16. Important recognition is given to students who achieve scholastic honors.
17. New ideas and theories are encouraged and vigorously debated.
18. Research is considered important by a lot of people on this campus.
19. Quite a few students enter with advanced standing from high school.
20. The library frequently has special displays of rare books and other historical material.
21. All freshmen must live in college approved housing.
22. Very few things here arouse much excitement or feeling.
23. Most people here seem to be especially considerate of others.
24. The history and traditions of the college are strongly emphasized.
25. Some places on campus are nicely arranged for small informal gatherings.
26. Students' midterm and final grades are reported to parents.
27. There is a lot of group spirit.
28. In many buildings there are coffee lounges or other pleasant spots for conversation.
29. Counseling and guidance services are really personal, patient, and helpful.
30. Graduation is a pretty mater-of-fact, unemotional event.
31. Distinguished speakers, active in the fields of politics or foreign affairs, are often brought to the campus.
32. Prizes are given for creative work in wirting, music, painting, and other arts.
33. Channels for expressing students' complaints are readily accessible.

34. Special museums or collections are important possessions of the college.
35. Students are encouraged to be independent and individualistic.
36. The library has paintings and/or phonograph records which circulate widely among the students.
37. Discrimination in housing or in clubs, either on or near the campus, would not be permitted here.
38. Science labs, music rooms, art studios, etc., are often open evenings and weekends.
39. There is a lot of interest here in poetry, music, painting, sculpture, architecture, etc.
40. The administration here doesn't seem to get upset over unusual ideas or behavior.
41. Some activities on campus, such as assemblies, lectures and debates, are concerned with aspects of religious life.
42. The administration expects students to dress properly.
43. People here are always trying to win an argument.
44. Students are expected to report any violation of rules and regulations.
45. The prevailing atmosphere is one of quiet good taste.
46. There are no liquor stores or taverns near the campus.
47. Nearby churches have an active interest in counseling and youth programs.
48. There are established rules of conduct for student activities, especially dating.
49. Bermuda shorts, pin-up pictures, etc. are common on this campus.
50. The college has a reputation for good manners.
51. Students are encouraged to criticize administrative policies and teaching practices.
52. Students must have a written excuse for absence from class.
53. There is an impressive and prominently displayed exhibit of sports trophies on the campus.
54. This campus is regarded as a good place to meet future business or marriage partners.
55. Teaching machines and programmed instruction are available.
56. The important people at this school expect others to show proper respect for them.
57. Student organizations are required to have a faculty advisor.
58. Fines and penalties for not getting things done on time are fairly common.
59. Vocational guidance is a main activity of the counseling office.
60. Religious activities on campus stress service to God and obedience to His laws.
61. Excellence in scholarship is the dominant feature of this college.
62. Prizes are given for outstanding student research papers.
63. Most students find that the library is easy and convenient to use.
64. There are so many things to do here that students are busy all the time.
65. There are lost of quiet and comfortable places for students to study.
66. Qualified students can satisfy some course requirements by petition and examination.
67. Laboratory facilities in the natural sciences are excellent.
68. Students who don't make passing grades are quickly dropped from school.
69. Typically the library is open until 10:30 p.m. or later.

70. The school is outstanding for the emphasis and support it gives to pure scholarship.
71. The school helps everyone get acquainted.
72. There is a lot of excitement and restlessness just before holidays.
73. Proper social forms and manners are important here.
74. The campus design, architecture, and landscaping suggest a friendly atmosphere.
75. Students are expected to work out the details of their own programs in their own way.
76. The main emphasis in freshmen orientation is on developing a sense of membership in the college community.
77. Resident students must get written permission to be away from the campus overnight.
78. Pleasant rooms are available for student clubs and other organizations.
79. Students are frequently reminded to take preventative measures against illness.
80. This school has a reputation for being very friendly.
81. Students are encouraged to take an active part in social reforms or political programs.
82. Many famous people are brought to the campus for lectures, concerts, student discussions, etc.
83. Students may be excused from regular course or departmental requirements to follow an approved program of independent study.
84. The expression of strong personal belief or conviction is pretty rare around here.
85. The student health center or counseling bureau includes psychiatric services.
86. This institution has an excellent reputation for academic freedom.
87. There are many facilities and opportunities for individual creative activity.
88. There are paintings or statues of nudes on the campus.
89. There is a regular place on the campus where students can make speeches about controversial issues.
90. Students are free to cut classes at their own discretion.
91. The administration seems especially concerned about protecting the institution from bad publicity.
92. Students here learn that they are not only expected to develop ideals but also to express them in action.
93. Student parties, whether in campus buildings or not, require administrative approval.
94. What is regarded as right and wrong is quite clear on this campus.
95. The Dean of Students office is mainly concerned with disciplinary matters.
96. Well established ways of doing things are important here.
97. Students ask permission before deviating from common policies or practices.
98. To rebel just for the sake of rebelling is regarded as pretty silly.
99. There always seem to be a lot of little quarrels going on.
100. Drinking and late parties are generally tolerated, despite regulations.

## Section II. The Academic Environment

Statement 101-200 are about instructors, classes, teaching, etc.

101. Education here tends to make students more practical and realistic.
102. Most faculty members really know the regulations and requirements that apply to student programs.
103. Frequent tests are given in most courses.
104. Faculty members are very punctual and expect the same from students.
105. The vocational value of many courses is emphasized.
106. In most classes every student is called on to recite.
107. The big college events arouse enthusiasm among the faculty as well as the students.
108. Because of definite program requirements, students have little free choice of electives.
109. In many classes students have an assigned seat.
110. Most people here feel that applied courses such as teacher training, business, physical education, etc. - are an important part of college education.
111. Standards set by the instructors are not particularly hard to achieve.
112. Many faculty members spend a great deal of time reading research journals in their field.
113. Courses, examinations, and readings are frequently revised.
114. Most courses require intensive study and preparation out of class.
115. Careful reasoning and clear logic are valued most highly in grading student papers, reports, or discussions.
116. The instructors really push the students' capacities to the limit.
117. Examinations here provide a genuine measure of a student's achievement and understanding.
118. Class discussions are typically vigorous and intense.
119. Course offerings and faculty in the natural sciences are outstanding.
120. Personality, pull, and bluff get students through many courses.
121. There are always a lot of faculty members at student events - such as sports, parties, concerts, plays.
122. In most classes the atmosphere is very friendly.
123. Many courses are designed to prepare students for well informed citizenship.
124. Few instructors really grade on the curve.
125. After a particularly good course students often applaud the instructor.
126. There are courses or voluntary seminars that deal with problems of marriage and the family.
127. Faculty members rarely or never call students by their first names.
128. In some courses students have an opportunity to organize a group project.
129. Some of the best-liked faculty members have devoted most of their careers to this institution.
130. Many faculty members are active in community work - churches, charities, schools, service clubs, etc.
131. Many of the natural science professors are actively engaged in research.

132. Instructors often divert class discussions from the main topic to interesting sidelines.
133. Course offerings and faculty in the social sciences are outstanding.
134. Students can take a semester or year abroad as part of their regular program.
135. Modern art and music get little attention here.
136. Most of the instructors are dedicated scholars in their fields.
137. There is considerable interest in the analysis of value systems, and the relativity of societies and ethics.
138. Many instructors constantly push students into questioning traditional assumptions in politics and philosophy.
139. There are a good many colorful and controversial figures on the faculty.
140. Programs of study about a particular area or region are offered - such as Latin American studies, Russian studies, etc.
141. Faculty members are always polite and proper in their relations with students.
142. In most courses students have a pretty good basis for knowing what their grade will be, even before the final exam.
143. Many faculty members are active in the local churches.
144. Many instructors require students to submit an outline before writing a term paper or report.
145. Students are always quiet and attentive in class.
146. In general education courses there is more emphasis on consistency than on controversy.
147. A major aim of this institution is to produce cultivated men and women.
148. It is easy to take clear notes in most courses.
149. Most instructors think of themselves as no different from other adults in the community.
150. Courses in religion are available for credit.
151. Most faculty members seem to prefer the tangible and realistic, rather than the theoretical.
152. The instructors regularly check up on the students to make sure that assignments are being carried out properly and on time.
153. Many faculty members are involved in services or consulting activities for outside groups, businesses, adult education, etc.
154. Some of the instructors react to questions in class as if the students were criticizing them personally.
155. The college offers many really practical courses such as typing, report writing, etc.
156. Instructors will sometimes increase a student's grade if they think he has worked especially hard and conscientiously.
157. Many courses stress the speculative or abstract rather than the concrete and tangiblb.
158. Faculty members are very business-like in dealing with students.
159. In some classes there are frequent recitations and drills.
160. The values most stressed here are open-mindedness and objectivity.
161. Most courses are a real intellectual challenge.
162. Faculty members seem to enjoy disagreeing with their colleagues.
163. Instructors usually take attendance in class.
164. Learning what is in the text book is enough to pass most courses.

165. Most of the instructors are very thorough teachers and really probe into the fundamentals of their subjects.
166. There is a lot of interest in the philosophy and methods of science.
167. Everyone knows the "snap" courses to take and the tough ones to avoid.
168. In their own lives, faculty members are excellent examples of scholarship and intellectual interests.
169. Students almost always wait to be called on before speaking in class.
170. It is fairly easy to pass most courses without working very hard.
171. Most of the faculty are not interested in students' personal problems.
172. The way most exams are given it would be easy for a student to cheat if he wanted to.
173. Many instructors assign projects which call for group work.
174. The instructors go out of their way to help you.
175. The college regards training people for service to the community as one of its major responsibilities.
176. In most classes students quickly learn everyone's name.
177. Students often run errands or do other personal services for the faculty.
178. There are courses or voluntary seminars that deal with problems of social adjustment.
179. A number of students get well acquainted with faculty members' families.
180. There are courses which involve students in activities with groups or agencies in the local community.
181. Many of the social science professors are actively engaged in research.
182. There is a lot of variety and innovation in the way many courses are taught.
183. Many faculty members have worked overseas or frequently traveled to other countries.
184. The school offers many opportunities for students to understand and criticize important works in art, music, and drama.
185. An open display of emotion would embarrass most faculty members.
186. Many instructors permit and sometimes welcome class discussion of materials that are outside their field of specialization.
187. Tutorial or honors programs are available for qualified students.
188. Quite a few faculty members have had varied and unusual careers.
189. A lot of student discussion is generated by courses in government, politics, and international relations.
190. Many instructors encourage students to write themes or reports which analyze personal experience.
191. There are a number of prominent faculty members who play a significant role in national or local politics.
192. Faculty members always wear coats and ties on the campus.
193. In many classes there is a course outline or study guide for the students.
194. In most exams the emphasis is on knowing the correct answers rather than on being able to defend a point of view.
195. Courses that fulfill general education or distribution requirements fit together to give students a well rounded experience.

196. Most faculty members attend church regularly.
197. In literature, drama, and music the main emphasis is on the classics.
198. Instructors clearly explain the goals and purposes of their courses.
199. Proper standards and ideals are emphasized in many courses.
200. Faculty members are never sarcastic in class.

## Section III. Students and Activities

Statements 201-300 refer to student characteristics, extra-curricular activities, and informal student life. Your answers should indicate the extent of your preference for these characteristics and activities.

201. Student pep rallies, parades, dances, carnivals or demonstrations occur very rarely.
202. Most students know who's who in campus politics.
203. Most students want to get a degree because of its economic value.
204. Student rooms are more likely to be decorated with pennants and pin-ups than with paintings, carvings, mobiles, fabrics, etc.
205. Campus leaders really know how to get things done.
206. The big college events draw a lot of student enthusiasm and support.
207. Many students try to pattern themselves after people they admire.
208. New jokes and gags get around the campus in a hurry.
209. Students typically help one another with their lessons.
210. Betting games and pools are popular on the campus.
211. Most students are pretty dissatisfied if they make less than a B grade.
212. Many students belong to departmental clubs: French club, philosophy club, math club, etc.
213. The hopes and plans of most students emphasize a lot more than job security, family happiness, and good citizenship.
214. Students put a lot of energy into everything they do - in class and out.
215. A lecture by an outstanding scientist would be poorly attended.
216. People around here seem to thrive on difficulty - the tougher things get, the harder they work.
217. Many students play chess, work double-crostics, and enjoy other abstract games.
218. Even in social groups students are more likely to talk about their studies than about other things.
219. Students who work hard for high grades are likely to be regarded as odd.
220. Long, serious, intellectual discussions are common among the students.
221. When students run a project or put on a show everybody knows about it.
222. Students spend a lot of time together at the snack bars, taverns, and in one another's rooms or homes.
223. Many upperclassmen play an active role in helping new students adjust to campus life.
224. Activities in student organizations are carefully and clearly planned.
225. Most students seem to have a genuine affection for this school.

226. There are often spontaneous little parties to celebrate pleasant events.
227. There is a great deal of borrowing and sharing among the students.
228. There are definite times each week when dining is made a gracious social event.
229. Students exert considerable pressure on one another to live up to the expected codes of conduct.
230. It's easy to get a group together for card games, singing, going to the movies, etc.
231. Many students have traveled overseas.
232. Concerts and art exhibits always draw big crowds of students.
233. A controversial speaker always stirs up a lot of student discussion.
234. Students like to browse in book stores.
235. Many students here develop a strong sense of responsibility about their role in contemporary social and political life.
236. Public debates are held frequently.
237. Groups of students sometimes spend all day at an art gallery.
238. Many student groups invite faculty members to lead special discussions.
239. There would be a capacity audience for a lecture by an outstanding philosopher or theologian.
240. Students are actively concerned about national and international affairs.
241. Students occasionally plot some sort of escapade or rebellion.
242. Rough games and contact sports are an important part of intramural athletics.
243. Students rarely get drunk and disorderly.
244. Student publications never lampoon dignified people or institutions.
245. Nearly all students expect to achieve future fame or wealth.
246. Students are conscientious about taking good care of school property.
247. Student parties are colorful and lively.
248. Some of the most popular students have a knack for making witty, subtle remarks with a slightly sexy tinge.
249. Students pay little attention to rules and regulations.
250. Few students bother with rubbers, hats, or other special protection against the weather.
251. Students spend a lot of time worrying about what kind of jobs they can get.
252. There are lots of dances, parties, and social activities.
253. New fads and phrases are continually springing up among the students.
254. There is a recognized group of student leaders on this campus.
255. Many student organizations have fund-raising projects.
256. There is an extensive program of intramural sports and informal athletic activities.
257. Students take a great deal of pride in their personal appearance.
258. Student elections generate a lot of intense campaigning and strong feeling.
259. It's important socially here to be in the right club or group.
260. Most students are interested in business, engineering, management, and other practical careers.
261. Students set high standards of achievement for themselves.

262. The main emphasis in most departmental clubs is to promote interest and scholarship in the field.
263. Most students have an ability to concentrate intensely over a long period of time.
264. Student government is more concerned with academic than with social affairs.
265. Students are sometimes noisy and inattentive at concerts and lectures.
266. There is very little studying here over the week-ends.
267. Election to a science honorary society is a real mark of distinction.
268. Most students here are really bright.
269. Few students here would ever work or play to the point of exhaustion.
270. Students are very serious and purposeful about their work.
271. Groups of students from the college often get together for parties or visits during holidays.
272. Students have many opportunities to develop skill in organizing and directing the work of others.
273. Many students are interested in and give support to such causes as Red Cross, Campus Chest, CARE, or Blood Banks.
274. In student activities and organizations there is a strong feeling of group loyalty.
275. There are frequent informal social gatherings.
276. Most of the students here are pretty happy.
277. Students commonly share their problems.
278. Student groups often meet in faculty members' homes.
279. Most students respond to ideas and events in a pretty cool and detached way.
280. Student organizations are very open and friendly and not at all exclusive.
281. A number of student organizations sponsor discussions and demonstrations about national issues.
282. Groups of students sometimes spend all evening listening to classical records.
283. Quite a few students develop close friendships with foreign students.
284. The student newspaper rarely carries articles intended to stimulate discussion of philosophical or ethical matters.
285. Student chorus, orchestra, and theater groups are really excellent.
286. Many students are interested in joining the Peace Corps or are planning, somehow, to spend time in another part of the world.
287. Most students regularly read the newspapers and weekly news magazines.
288. Few students are planning post-graduate work in the social sciences.
289. A lecture by an outstanding literary critic would be poorly attended.
290. To most students here art is something to be studied rather than felt.
291. Spontaneous student rallies and demonstrations occur frequently.
292. The person who is always trying to "help out" is likely to be regarded as a nuisance.
293. Students often start projects without trying to decide in advance how they will develop or where they will end.
294. Many students drive sports cars.
295. Most students show a good deal of caution and self-control in their behavior.

296. Society orchestras are more popular here than jazz bands or novelty groups.
297. Most student rooms are pretty messy.
298. Many students seem to expect other people to adapt to them rather than trying to adapt themselves to others.
299. Dormitory raids, water fights, and other student pranks would be unthinkable here.
300. Students frequently do things on the spur of the moment.

2. The instrument administered to students to obtain descriptions of the college environment contained two parts. The first part consisted of the same 300 items prefaced by the following instructions

## JUNIOR COLLEGE ENVIRONMENT SCALES

Junior colleges differ from one another in many ways. Some things that are characteristic of one place may not be true at another. You are asked to be a reporter about your campus. What kind of place is it?

The first part of this booklet contains 300 statements about college life. They are arranged in three sections: the first 100 items refer to the college in general, the second 100 items refer to your classes and instructors, and the third 100 items refer to your fellow students and your activities. Using the answer sheet provided, mark each item either TRUE or FALSE. As you read each statement in the booklet, blacken space:

T - when you think the statement is generally TRUE or characteristic, is something which exists, occurs, or might occur, or is the way people tend to feel and act at your school;

F - when you think the statement is generally FALSE or not characteristic, is something which does not exist or occur or is not likely to occur, or is not the way people typically feel and act at your school.

The second part of the booklet contains 44 items asking for some information about you: your college experience, plans, activities, etc. Indicate your answers to these questions on the answer sheet, according to the instructions given with the items.

Notice that the consecutively numbered items on the answer sheet go across rather than down the page. Be sure to put your answer to each item in the right place. Fill in the answer sheet with ordinary pencil; please do not use ink. Work rapidly, going through the entire list of statements in the booklet. Be sure to answer every item. DO NOT WRITE IN THIS BOOKLET. DO NOT PUT YOUR NAME ON YOUR ANSWER SHEET; all answers are to remain anonymous.

After you have finished, place the answer sheet and item booklet in the envelope provided and seal it. Complete anonymity will thus be maintained. Return the sealed envelope as directed by the person who gave these materials to you.

Part II of the Junior College Environment Scales is reproduced below.

## PART II

The following statements pertain to your college experience, activities, plans, achievement, etc. Instructions are given with each item or group of items. Indicate each of your answers by blackening the appropriate space on your answer sheet.

301. Age: Mark 1 if you are seventeen or younger.
Mark 2 if you are eighteen.
Mark 3 if you are nineteen.
Mark 4 if you are twenty to twenty-three.
Mark 5 if you are twenty-four or older.

302. Marital status:
Mark 1 if you are single.
Mark 2 if you are married.
Mark 3 if you are divorced.
Mark 4 if you are separated.
Mark 5 if you are widowed.

303. Sex: Mark 1 if you are male.
Mark 2 if you are female.

304. Indicate which semester or quarter this is for you in school here.
1 -- your first semester or quarter here
2 -- second semester or quarter
3 -- third semester or quarter
4 -- fourth semester or quarter
5 -- fifth semester or quarter or beyond

305. Did you graduate from high school?
1 -- yes
2 -- no

306. Indicate the highest level attained in college. (If you are on the quarter system, report only 2/3 of your total units.)
1 -- if you have completed less than 15 units
2 -- if you have completed 15 units
3 -- if you have completed 30 units
4 -- if you have completed 45 units
5 -- if you hold the equivalent of an A.A. degree or higher

307. What type of program are you in?
    1 -- Vocational (Licenced vocational nursing, building trades, etc.)
    2 -- Technical (Electronics, registered nursing, printing, data processing, etc.)
    3 -- College transfer

308. How much of the time do you feel satisfied with your college?
    1 -- nearly all the time
    2 -- much of the time
    3 -- about half the time
    4 -- occasionally
    5 -- rarely

309. What is your approximate overall grade point average, if A=4, B=3, C=2, D=1, and F=0?
    1 -- 3.30-4.00
    2 -- 2.60-3.29
    3 -- 1.90-2.59
    4 -- 1.20-1.89
    5 -- 1.19 or below

310. How many units are you currently taking?
    1 -- fewer than 12 units
    2 -- 12 units or more

311. How much do you like your college?
    1 -- like it extremely well
    2 -- like it more than dislike it
    3 -- neither like nor dislike it
    4 -- dislike it more than like it
    5 -- dislike it extremely

312. To what extent have you found groups in the college which were really congenial and with which you felt happy?
    1 -- very much
    2 -- quite a bit
    3 -- somewhat
    4 -- not very much
    5 -- not at all

Statements 313-328 refer to extra-curricular activities. Indicate how much you participate in each of these activities using the following code:
    1 -- very much
    2 -- quite a bit
    3 -- moderate amount
    4 -- a little
    5 -- none

313. Intercollegiate and varsity sports as a participant
314. Intramural sports as a participant
315. Attending sports events as a spectator

316. Publications: college paper, yearbook, etc.
317. Music organizations: chorus, band, etc.
318. Dramatics
319. Student government
320. Religious groups
321. Academic clubs, honoraries
322. Social groups: fraternities, etc.
323. Hobby groups
324. Attending musical or dramatics events: school concerts, plays, etc.
325. Debating groups
326. Service groups
327. Visiting art exhibits, art galleries, museums, etc.
328. Attending lectures by guest speakers

Statements 329-344 represent a number of goals of education. Indicate on your answer sheet the amount of progress you feel you are making toward achieving each one. Mark:

1 -- very much
2 -- quite a bit
3 -- some
4 -- very little
5 -- none

329. Gaining experience and skill in getting things done promptly and properly.
330. Developing abilities to communicate and work effectively with groups and individuals.
331. Developing the ability to write, speak, and communicate clearly, correctly, and effectively.
332. Vocational training -- skills and techniques directly applicable to a job.
333. Adjusting to the behavior expected in your college and social groups.
334. Knowing the accepted rules and customs of the social groups and organizations to which you belong.
335. Learning to get along well with others even though they may think and act differently from you.
336. Developing an ability to think critically.
337. Background for further education in some professional, scientific, or scholarly field.
338. Developing an understanding and appreciation of the concepts, attitudes, and methodology of science.
339. Ability to define and solve problems in a rational and systematic manner.
340. Knowledge of and facility in applying principles of modern technology.
341. Developing an interest in reading and learning beyond the requirements of college classes.
342. Acquiring an appreciation of ideas and their usefulness.
343. Understanding major issues and problems that confront modern society in America and around the world.
344. Developing an appreciation and enjoyment of art, music, and literature.

3. The instrument administered to students to obtain indications of their environmental preferences consisted of two parts. The first part contained the basic 300 items prefaced by the following instructions.

## STUDENT PREFERENCE SCALES

People don't all like the same things about a junior college. What on person prefers another may dislike strongly. These preferences can affect the atmosphere of a college a great deal. Therefore, an adequate description of a junior college should include information about the preferences held by people at that college.

The first 300 statements in this booklet describe policies, practices, facilities, activities, and conditions which may or may not exist in any particular junior college. In responding to each item, you are asked to imagine that you are a student in a junior college for which the statement _is_ true. (You need not have any particular institution in mind,) Then, on the answer sheet provided, you are to indicate the extent to which you would prefer or not prefer to be in such an institution.

For each item, blacken the appropriate space on the answer sheet, using the following code:

1. I would definitely prefer and would enjoy immensely a junior college characterized by this statement.
2. I would prefer and would be comfortable in a junior college characterized by this statement, but it is not essential for me.
3. This statement does not affect me at all. If true of a junior college, it would make me neither comfortable nor uncomfortable and would neither be preferred nor unpreferred.
4. I would not prefer and would be somewhat uncomfortable in a junior college characterized by this statement, but it could be tolerated.
5. I would definitely not prefer and would be extremely uncomfortable in a junior college characterized by this statement.

The first 300 items are arranged in three sections. You are to answer them according to the directions given above. The remaining items ask for some information about you: your college experience, your plans, your activities, your achievements, etc. Indicate your answers to these questions on the answer sheet according to the instructions given with the items.

Notice that the consecutively numbered items on the answer sheet go _across_ the page rather than down the page. Be sure to put your answer to each item in the right place. Fill in the answer sheet with ordinary pencil; please do _not_ use ink. Work rapidly, going through the entire list of statements in the booklet. Please be sure to answer every item. DO NOT WRITE IN THIS BOOKLET. DO NOT PUT YOUR NAME ON YOUR ANSWER SHEET; all answers are to remain anonymous.

After you have finished, place the answer sheet and item booklet in the envelope provided and seal it. Complete anonymity will thus be maintained. Return the sealed envelope as directed by the person who gave these materials to you.

Part II of the Student Preference Scales was identical to Part II of the Junior College Environment Scales with the addition of the following four items which could not be conveniently used in the JCES due to answer sheet format.

345. Indicate the category which comes closest to the occupation you intend to enter after completing your education.
    1 -- Professional (doctor, lawyer, teacher, scientist, engineer, etc.)
    2 -- Semi-professional and technical (airline pilot, draftsman, nurse, dental technician, electronics technician, etc.)
    3 -- Executive, managerial, or administrative position in business, government, or industry (buyer, inspector, store department head, bank executive, etc.)
    4 -- Self-employed proprietary or managerial position in business or industry
    5 -- Clerical position (bookkeeper, cashier, secretary, telephone operator, etc.)
    6 -- Salesman
    7 -- Craftsman (cabinetmaker, typesetter, printer, toolmaker, plumber, electrician, mechanic, etc.)
    8 -- Farm owner or manager
    9 -- Foreman in construction, manufacturing, etc.
    10 -- Creative artist (musician, actor, sculptor, writer, dancer, etc.)

346. Indicate the category which comes closest to your parent's occupation. Use the code given in question 345.

347. Indicate your major, using the following code.
    1 -- Science (physics, chemistry, biology, math, etc.)
    2 -- Social science (history, sociology, economics, psychology, etc.
    3 -- Humanities (literature, foreign language, philosophy, etc.)
    4 -- Engineering
    5 -- Business or commerce
    6 -- Health services (nursing, dental assistant, etc.)
    7 -- Fine arts (art, drama, music)
    8 -- Liberal arts
    9 -- Public and personal services (police science, cosmetology, etc.)
    10 -- Other vocational-technical areas (agriculture, printing, etc.)

348. Indicate the highest annual income you expect to receive in your lifetime.

1 -- $ 2,999 or less
2 -- $ 3,000-4,999
3 -- $ 5,000-7,999
4 -- $ 8,000-9,999
5 -- $10,000-12,499
6 -- $12,500-14,999
7 -- $15,000-17,499
8 -- $17,500-19,999
9 -- $20,000-49,999
10 -- $50,000 or more

Responses to the FPS, SPS, and JCES were recorded on answer sheets for processing by the IBM 1232 optical page reader.

Packets of instruments and answer sheets (IBM 1231) were sent to colleges with the following instructions:

## INSTRUCTIONS FOR COLLEGE REPRESENTATIVE

This packet contains:

a. 100 Junior College Environment Scales (JCES) booklets and JCES No. 1 answer sheets.
b. 100 Student Preference Scales (SPS) booklets and SPS No. 1 answer sheets.
c. 50 Faculty Preference Scales (FPS) booklets and FPS No. 1 answer sheets.
d. 250 manila envelopes.
e. Mailing label and postage stamps.

The JCES is to be administered to a sample of 100 students.

The SPS is to be administered to a different sample of 100 students.

The FPS is to be administered to a sample of 50 faculty members. (Smaller colleges may not have 50 faculty members, in which case as many of the faculty as possible should participate.)

It is important that all the schools in the survey use the same basic procedures in selecting the two samples of students and in administering the instruments. Therefore it is suggested that you follow the procedures outlined below.

1. Select, at random, two samples of 100 students each. The students selected should be representative of the entire student body (excluding students in their first semester at your college) on such variables as major, scholastic ability, age, and length of time in college. You may want to use one or more required classes for your sample. If you do, please be sure that no one takes the same scale twice, and that no one takes both the Student Preference Scales and the Junior College Environment Scales.

2. Administer the scales to the two groups of 100 students. Give each student a booklet, matching answer sheet, and envelope. Read the following instructions to the students:

> You are being asked to take part in a survey of junior colleges to determine what the characteristics of junior colleges are, what people would like them to be, and how these things affect the kind of school that develops.
>
> When I have finished, read the instructions on the first page of your booklet. Record your answers to all of the items on the answer sheet. You are not to put your name on your answer sheet; we do not want to know how any individual answered the items.
>
> There is no time limit, but you should work rapidly, not pondering too long on any single item. You may use any pencil (Preferably a soft lead pencil) to mark your answer sheets, but do not use ink or ball point pen. Be careful not to make any marks on the answer sheet except to indicate your responses. If you wish to change a response, erase it completely, then blacken the correct space.
>
> When you have finished, place both your answer sheet and your booklet in the manila envelope and seal the envelope. I will collect them when everyone has finished.

You may, instead, indicate some other procedure for collecting the sealed envelopes. Collect all the envelopes, with booklets and answer sheets sealed inside.

3. Use what ever procedures seem best in selecting a group of 50 faculty members. The sample should be representative of the total faculty. Administer or have the instruments completed by the faculty. They should return the FPS booklets and answer sheets to you sealed in an envelope, to protect their anonymity.

Place the 250 sealed envelopes in a single package and return it to U.C.L.A., using the label and postage enclosed.

At the conclusion of the study, you will be sent a copy of the final results. On your request, the questionnaire results for your college will also be sent.

4. The following instrument was completed by all colleges accepting an invitation to participate in the study. Some of the information in this Preliminary Survey was used to define the district and/or service area, compute output measures (in conjunction with the Final Survey data), and to substantiate the stratification of the sample. Other data allowed the college to indicate the accuracy with which it could report the necessary statistics.

## Preliminary Survey Form

College ____________________
(Please fill in information or check boxes, as appropriate)

1. The college is:
   - (a) accredited by a regional association . . . . . . . . . . . . . . ☐
   - (b) accredited only by a state organization or agency . . . . . . ☐
   - (c) not accredited . . . . . . . . . . . . . . . . . . . . . . . . . . ☐

2. The college provides room and/or board for some of its students in college owned or supervised housing.
   - (a) yes . . . . . . . . . . . . . . . . . . . . . . . . . . . . ☐
   - (b) no . . . . . . . . . . . . . . . . . . . . . . . . . . . . ☐

3. The college has either a separate evening or an extended-day program in addition to the regular day program.
   - (a) yes . . . . . . . . . . . . . . . . . . . . . . . . . . . . ☐
   - (b) no . . . . . . . . . . . . . . . . . . . . . . . . . . . . ☐

4. The curriculum of the college consists of:
   - (a) both transfer and technical-vocational courses . . . . . . . . ☐
   - (b) only transfer courses . . . . . . . . . . . . . . . . . . . . ☐
   - (c) only technical-vocational courses . . . . . . . . . . . . . . ☐

5. As of October, 1964, the total full-time enrollment (day and evening) is . . . . . . . . . . . . . . . . . . . . ____________

6. As of October, 1964, the total part-time enrollment (day and evening) is . . . . . . . . . . . . . . . . . . . . ____________

7. For the Fall semester, 1964, the number of full-time employees who teach at least one course is . . . . . . . . . . . ____________

8. The college is organized as:
   - (a) an independent junior college district with its own governing board . . . . . . . . . . . . . . . . . . . . . . ☐
   - (b) part of a unified district with a board that is also responsible for secondary, and possibly elementary shcools . ☐
   - (c) one campus of a district containing two or more campuses . . ☐
   - (d) a branch of a state university or other senior institution . ☐
   - (e) part of a state system of junior colleges, with one central governing board rather than a local board . . . . . . . ☐
   - (f) Other (Please explain) . . . . . . . . . . . . . . . . . . . ☐

     ________________________________________

     ________________________________________

Answer questions 9, 10, or 11, as appropriate, to indicate: (1) the boundary of the district, if 8 (a) or 8 (b) was checked; or (2) the approximate boundaries of the "service area," if 8 (c), 8 (d), 8 (e) or 8 (f) was checked.

9. The district or service area is coterminous with and includes all of the area encompassed by the following governmental subdivisions (school districts, cities, counties, townships, boroughs, etc.)

________________________________________

________________________________________

10. (a) The district or service area includes all of the area encompassed by the following governmental subdivisions:

________________________________________

________________________________________

(b) The district or service area includes 50% or more of the area encompassed by each of the following governmental subdivisions:

________________________________________

________________________________________

11. If a map is included with this "Preliminary Survey Form," indicate the district or service area by outlining it on the map.

Please answer questions 12-18 as accurately as possible with the information available to you. If data cannot be obtained, give your best estimate and place a check in the "estimate" column beside the item.

Est.

12. The total population of the district or service area is . . . . . . . . . . . . . . . . . . . . . ________ ____

13. The college age (18-21 population of the district or service area is . . . . . . . . . . . . . . . ________ ____

14. The total number of students enrolled in secondary grades (9-12) in the district or service area is ________ ____

15. The total number of high school graduates in the district or service area was . . . . . . . . . . ________ ____

16. What percent of the college enrollees come from outside the district or service area? . . . . . . . . . ________ ____

17. The most important "feeder" high schools for the college (those high schools from which most of the students come) are:

________________________________________

________________________________________

18. What standardized ability or achievement tests were taken by your students:

(a) before admission to college?

________________________________________

________________________________________

(b) during the admission process or after entering college?

________________________________________

________________________________________

Please answer the remaining questions with your most recent information. Indicate in the appropriate column the academic year to which the information applies. If data must be estimated, indicate this by checking the "estimate" column beside each item involved.

| | | Acad. Yr. | Est. |
|---|---|---|---|
| 19. How many students complete an associate degree? | | | |
| 20. How many students transfer during the year or at the beginning of the following year to a senior institution: | | | |
| (a) after having completed 4 or more semesters in the junior college? | | | |
| (b) after having completed 2 or 3 semesters in the junior college? | | | |
| (c) after completing only 1 semester in the junior college? | | | |
| 21. How many students are placed on probation? | | | |
| 22. How many students are dismissed or refused permission to re-enroll at the next available enrollment period? | | | |
| 23. How many students complete a certificate program in a specific technical or vocational field such as business, electronics, carpentering, etc.? | | | |
| 24. How many technical and vocational students find employment in fields for which they have been trained or in closely allied fields? | | | |
| 25. Of those students transfering to senior institutions, what percent are likely to complete bachelors degrees? | | | |
| 26. How many students are enrolled in essentially transfer programs? | | | |
| 27. How many students are enrolled in essentially technical programs? (electronics, business, associate degree, nursing, etc.) | | | |
| 28. How many students are enrolled in essentially vocational programs? (plumbing, printing, mechanics, etc.) | | | |

Signed

Title

Date

5. The Final Survey allowed the computation of the output measures which, in general, described what happened to students enrolled in the previous year, as indicated on the Preliminary Survey:

## Final Survey Form

College________________________________________________

City__________________ County______________ State______________

Please fill in the requested information or check boxes, as appropriate.

1. Date____________________________________________.
2. The total full-time enrollment this Fall is____________________.
3. The total part-time enrollment this Fall is____________________.

If your college has a legally established district which it serves (such as an independent, unified, etc. district) answer question 4. If not (e.g., you are part of a state system), skip to question 5.

For purposes of question 4., please distinguish between "district" and "service area." "District" refers to the legally defined area which the college serves and from which it derives tax funds, board members, etc. "Service area" is the geographic area which the college "actually" serves, i.e., the area from which most of its students come.

The "service area" would probably be smaller than the "district" in districts with two or more campuses, such as Los Angeles, Chicago, St. Louis, etc. Even though any student in the district might go to any college maintained by the district, there are probably certain areas of the district from which students tend to go to one college and not another. A given college's "service area" might also lap over beyond the district boundaries.

The "service area" would probably be larger than the "district" in districts with only one campus. This would be the case if lots of students tend to come from out-of-district.

4. A. (1) The area of the district in square miles, is____________.
 (2) The service area, in square miles, is (approximately)____
 (3) Indicate the number of the following types of institutions located in the district:

 (a) Technical and/or vocational high schools___________.
 (b) Adult high schools_____________________________.
 (c) Private colleges (junior and senior) and universities_____________________________.
 (d) Public senior colleges and universities____________.

If your college is part of a multi-campus district, answer 4. B. If your college is the only campus maintained by the district, answer 4. C.

4. B. Based on the above discussion, the following classifications might be used to describe the geographic areas from which students come, for a college in a multi-campus district. Please indicate the percent of your student body (all enrolled students) that could be classified under each, and the approximate area (in square miles) for each.

| | % of Students | Area |
|---|---|---|
| (1) In-district and in service area | | |
| (2) In-district but out of service area | | |
| (3) Out-of-district but in service area | | |
| (4) Out-of-district and out of service area | | xxxxx |

(Make sure that the sum of areas for 4. B. (1) and 4. B. (2) equals the area indicated on 4. A. (1) and that the sum of areas for 4. B. (1) and 4. B. (3) equals the area indicated on 4. A. (2).) (Skip now to item 5.)

4. C. Based on the above discussion, the following classifications might be used to describe the geographic areas from which students come, for a college in a single-campus district. Please indicate the percent of your student body (all enrolled students) that could be classified under each and the approximate area (in square miles) for each.

| | % of Students | Area |
|---|---|---|
| (1) In-district and in service area | | XXXXXXXX |
| (2) Out-of-district but in service area | | |
| (3) Out-of-district and out of service area | | XXXXXXXX |

(Make sure that the sum of areas for 4. C. (2) equals the area indicated on 4. A. (2).)

5. A. Please answer the following items on the basis of data for the 1964-1965 academic year.

(1) How many students completed an associate degree?------__________

(2) How many students transferred (during or at the end of either semester) to a senior institution?----------__________

(3) How many students were placed on probation for the first time during or after either semester?-----------__________

(4) How many students were dismissed or refused permission to re-enroll at the next available enrollment period?-__________

(5) How many students completed a certificated program in a specific technical or vocational field such as business, electronics, carpentering, etc.-------------____________

(6) How many technical and vocational students found employment in fields for which they had completed training or in closely allied fields?----------------____________

B. Please answer the following items on the basis of this year's data (1965-1966).

(1) How many students are enrolled in essentially transfer programs?--------------------------------------------____________

(2) How many students are enrolled in essentially technical programs? (electronics, business, associate degree nursing, etc.)-----------------------------------------____________

(3) How many students are enrolled in essentially vocational programs? (plumbing, printing, mechanics, etc.)-----____________

(4) How many students are known to have jobs (on or off campus, full or part-time?)--------------------------____________

(5) Tuition charged a full-time resident student is-----$____________

(6) Sum of other fees required a full-time resident student-------------------------------------------$____________

Signed ____________________________

Title ____________________________

# Appendix J

## Reliability of Instruments

Three different assessments of reliability were calculated for the JCES, SPS and FPS instruments. This appendix describes each of the measures and how they were applied to each of the instruments.

### Reliability of Item Proportions and Means

Sample statistics were used for the purposes of determining whether or not a given college could be described by a certain item in the JCES, SPS and FPS instruments. Therefore, standard errors of estimate were calculated for each of the items in all three instruments in order to assess the reliability of the measures, that is, the confidence one could have that the college could actually be characterized by a given item.

As mentioned previously, two-thirds or greater of the sample responding in the keyed direction or one-third or less in the opposite direction were designated as the boundary lines for scoring a response to an item in the JCES instrument as characteristic (or not characteristic) of the college. But since the proportion answering the question true for any given college was estimated by a random sample of other than first semester students, a standard error of a proportion was calculated for each college using the sophomore enrollment as an estimate of the population. The following formula was used:

$$S_{Pq} = \sqrt{\frac{pq}{N_s}\left(1 - \frac{N_s}{N_c}\right)}$$

where Pq is the variance of the item (in our case $p = 2/3$ and $q = 1/3$)
$N_s$ is the size of the random sample
$N_t$ is the size of the population

This statistic provides us with the confidence limits within which the true portion would lie, that is, the range within which there is a high probability that the actual proportion would fall ($\text{PROB.}[.66 - S_{pq} < p < .66 + S_{pq}] = \text{PROB.}'$). For example, if the sophomore population was 200 and 100 students were sampled, we could say that the chances are about 7 out of 10 that the population percentage is between 63 and 69. Thus percentages which fall outside of these limits would be rather unlikely to change sufficiently to affect the institutions score. Percentages which lie between these limits, however, may shift around enough to produce some random modifications in the total score.

Standard errors were also calculated for the items in the SPS and the FPS instruments. The same formula was used except that the variance for each item was the regular "$S^2$" instead of "pq" since the response alternatives for these items consisted of a five-point rating scale rather than true-false alternatives. The formula for this variance is as follows:

$$S^2 = \frac{\sum_{i=1}^{N} (x - \bar{x})^2}{N_s}$$

where $x$ is the rating for each subject in the sample
$\bar{x}$ is the mean rating for the college and
$N_s$ is the size of the random from the college.

The standard errors were then found for $\sigma = .9$ and $\sigma = 1.5$, which were (except for a few cases) the largest and smallest standard deviations encountered. All information pertaining to these standard errors is presented in Table J1.

Reliability Coefficients

Reliabilities were obtained for scales on the JCES, SPS, and FPS instruments by adapting the Kuder-Richardson Formula 20 to the type of data obtained by these instruments. This formula, as shown in the following formula, is directly applicable under two conditions: (1) the scale items have true-false response alternatives and (2) each unit of analysis obtains a score for each item which corresponds to a true or false response (0 or 1):

$$R_{xx} = \frac{N}{N-1} \left[ \frac{1 - \sum_{g=1}^{N} s_g^2}{s_x^2} \right]$$

where $R_{xx}$ is the reliability coefficient of the scale
$N$ is the number of items in the scale,
$s_g^2$ is the variance of item g (equals $P_g$ $(1 - P_g)$,
$P_g$ is the percentage answering the item correct, and
$s_x^2$ is the scale variance.

However, for our purposes the formula had to be altered since the JCES data did not meet condition 2 and the SPS and FPS data did not meet either conditions 1 or 2. Although the JCES scale items were true-false items, scores for each of the items did not correspond to a true or false response (1 or 0) since our unit of analysis was not an individual but a college. Each college obtained a score on the item depending on the percentage of individuals who answered the question true (or false if the items were keyed negatively). The scoring was as follows:

| | |
|---|---|
| +1 | Two-thirds or more of the subjects at the college answered the item as keyed |
| 0 | Less than 2/3 but greater than 1/3, of the subjects at the college answered the item as keyed |

-1 One-third or less of the subjects at the college answered the item as keyed.

Thus the variance for each item was not the percentage of unit of analysis answering the item "true" times the number answering the item "false" (pq), but was the mean squared deviation from an average score for the item for all of the colleges.

The same situation applies to the SPS and FPS scales. In addition the scale items did not have true-false response alternatives but the subjects rated the item along a five-point preference continuum. In this case then the unit of analysis was either students or faculty. Thus, reliabilities for all three sets of scales were obtained by using the same Kuder-Richardson formula but with the following change in the variance measure.

$$S_g^2 = \frac{\sum_{i=1}^{n} (X_i - \bar{X})^2}{n - 1},$$

where n is the number of students or faculty (depending on which instrument)

$X_i$ is the score of each student or faculty member on each item, and

$\bar{X}$ is the mean score on each item for all subjects (student or faculty).

Computed reliabilities are listed in Table J2, J3, and J4.

## Internal Consistency

The extent to which each item discriminates between the high and low scores on the total scale was indicated by obtaining the correlation of each item with the total scale score. The higher the correlation, the greater the extent to which the item measures the same variable the total scale measures. A scale with a large proportion of its items substantially correlated with the total score is internally consistent; that is, all items tend to measure the same thing (scale variable). The internal consistency of each of the scales in the three instruments is represented by the frequency distributions of item correlations in Tables J2, J3, and J4.

## Table J1

### Estimated Standard Errors for JCES, SPS, and FPS Items

| College | Estimated Student Population (Sophomore Enrollment) | SPS<br>No. of Forms | SPS<br>S.E. for $\sigma$ = .9 | SPS<br>S.E. for $\sigma$ = 1.5 | JCES<br>No. of Forms | JCES<br>S.E. for p = 1/3 q = 2/3 | Faculty Population | FPS<br>No. of Forms | FPS<br>S.E. for $\sigma$ = .9 | FPS<br>S.E. for $\sigma$ = 1.5 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 619 | 86 | .090 | .150 | 100 | .043 | 72 | 50 | .070 | .117 |
| 2# | 111 | 93 | .038 | .063 | 86 | .024 | 35 | 17 | .181 | .302 |
| 3 | 696 | 89 | .089 | .149 | 68 | .054 | 113 | 33 | .132 | .220 |
| 4 | 1302 | 69 | .106 | .176 | 65 | .057 | 311 | 31 | .153 | .256 |
| 5 | 183 | 66 | .089 | .148 | 25 | .088 | 128 | 21 | .180 | .299 |
| 6# | 206 | 84 | .076 | .126 | 101 | .033 | 44 | 13 | .210 | .349 |
| 7# | 1045 | 94 | .089 | .148 | 97 | .046 | 94 | 33 | .126 | .210 |
| 8 | 1365 | 101 | .086 | .144 | 101 | .045 | 183 | 50 | .109 | .181 |
| 9 | 1602 | 90 | .092 | .154 | 94 | .049 | 220 | 42 | .125 | .208 |
| 10 | 3634 | 49 | .128 | .213 | 59 | .061 | 434 | 47 | .124 | .207 |
| 11 | 4988 | 92 | .093 | .155 | 94 | .048 | 327 | 48 | .120 | .200 |
| 12 | 3469 | 73 | .104 | .174 | 91 | .049 | 564 | 43 | .132 | .220 |
| 13 | 2061 | 95 | .090 | .151 | 81 | .048 | 401 | 44 | .128 | .213 |
| 14 | 70 | 29 | .128 | .213 | 35 | .056 | 35 | 17 | .157 | .261 |
| 15 | 205 | 48 | .114 | .190 | 58 | .032 | 48 | 19 | .161 | .268 |
| 16 | 1972 | 107 | .085 | .141 | 100 | .046 | 541 | 50 | .121 | .202 |
| 17# | 436 | 86 | .087 | .146 | 97 | .041 | 80 | 38 | .106 | .176 |
| 18 | 1737 | 97 | .089 | .148 | 102 | .045 | 164 | 29 | .132 | .220 |
| 19 | 634 | 97 | .086 | .143 | 98 | .044 | 122 | 46 | .105 | .175 |
| 20 | 567 | 98 | .082 | .137 | 79 | .049 | 88 | 47 | .090 | .149 |
| 21 | 113 | 96 | .047 | .079 | 94 | .019 | 45 | 23 | .131 | .219 |
| 22 | 313 | 86 | .083 | .138 | 86 | .043 | 66 | 43 | .081 | .135 |
| 23 | 1083 | 84 | .094 | .152 | 84 | .040 | 235 | 44 | .122 | .204 |
| 24 | 439 | 91 | .084 | .140 | 76 | .043 | 72 | 35 | .109 | .182 |
| 25 | 376 | 77 | .091 | .152 | 100 | .040 | 78 | 32 | .122 | .204 |

## Table J1 Continued

| | | SPS | | | JCES | | | FPS | | |
|---|---|---|---|---|---|---|---|---|---|---|
| College | Estimated Student Population (Sophomore Enrollment | No. of Forms | S.E. for σ = .9 | S.E. for σ = 1.5 | No. of Forms | S.E. for p = 1/3 q = 2/3 | Faculty Population | No. of Forms | S.E. for σ = .9 | S.E. for σ = 1.5 |
| 26 | 260 | 52 | .122 | .186 | 51 | .059 | 62 | 25 | .139 | .232 |
| 27 | 847 | 96 | .087 | .144 | 70 | .054 | 257 | 30 | .154 | .257 |
| 28 | 772 | 19 | .204 | .340 | 9 | .156 | 110 | 11 | .257 | .429 |
| 29 | 1103 | 58 | .115 | .192 | 70 | .054 | 194 | 46 | .116 | .193 |
| 30 | 213 | 90 | .072 | .120 | 99 | .033 | 93 | 33 | .126 | .210 |
| 31# | 122 | 93 | .046 | .076 | 101 | .020 | 74 | 29 | .130 | .217 |
| 32# | 96 | 98 | .000 | .000 | 98 | .000 | 38 | 16 | .173 | .285 |
| 33 | 276 | 78 | .086 | .144 | 90 | .041 | 100 | 47 | .096 | .159 |
| 34 | 63 | 95 | .000 | .000 | 99 | .000 | 52 | 21 | .152 | .253 |
| 35 | 313 | 95 | .077 | .128 | 93 | .041 | 300 | 43 | .127 | .212 |
| 36 | 201 | 100 | .064 | .106 | 98 | .034 | 43 | 24 | .122 | .204 |
| 37 | 110 | 23 | .167 | .278 | 43 | .056 | 24 | 12 | .184 | .306 |
| 38 | 273 | 90 | .078 | .130 | 98 | .038 | 50 | 25 | .127 | .212 |
| 39 | 257 | 98 | .070 | .116 | 97 | .037 | 35 | 45 | .000 | .000 |
| 40 | 154 | 61 | .090 | .149 | 59 | .048 | 57 | 25 | .135 | .225 |
| 41 | 186 | 63 | .092 | .154 | 60 | .050 | 35 | 25 | .096 | .160 |
| 42 | 157 | 91 | .061 | .102 | 78 | .041 | 40 | 27 | .099 | .165 |
| 43# | 156 | 100 | .054 | .090 | 100 | .029 | 32 | 26 | .076 | .128 |
| 44 | 133 | 92 | .052 | .087 | 92 | .037 | 26 | 21 | .086 | .144 |
| 45 | 202 | 94 | .068 | .113 | 99 | .044 | 94 | 24 | .159 | .264 |
| 46# | 144 | 61 | .088 | .146 | 67 | .042 | 45 | 17 | .172 | .287 |
| 47 | 202 | 64 | .093 | .155 | 95 | .035 | 79 | 22 | .163 | .272 |
| 48 | 117 | 85 | .051 | .085 | 98 | .019 | 42 | 26 | .109 | .182 |
| 49 | 169 | 89 | .066 | .109 | 81 | .038 | 45 | 21 | .143 | .239 |
| 50 | 413 | 83 | .088 | .147 | 73 | .050 | 102 | 23 | .165 | .275 |
| 51# | 581 | 78 | .095 | .158 | 77 | .050 | 163 | 30 | .148 | .247 |
| 52 | 1367 | 100 | .087 | .144 | 94 | .047 | 219 | 47 | .116 | .194 |
| 53# | 1062 | 56 | .117 | .195 | 59 | .059 | 286 | 43 | .127 | .211 |

## Table J1 Continued

| | | SPS | | | JCES | | FPS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| College | Estimated Student Population (Sophomore Enrollment) | No. of Forms | S.E. for $\sigma = .9$ | S.E. for $\sigma = 1.5$ | No. of Forms | S.E. for $p = 1/3$ $q = 2/3$ | Faculty Population | No. of Forms | S.E. for $\sigma = .9$ | S.E. for $\sigma = 1.5$ |
| 54# | 594 | 101 | .082 | .136 | 99 | .042 | 229 | 53 | .108 | .181 |
| 55 | 192 | 84 | .074 | .123 | 75 | .020 | 23 | 7 | .284 | .473 |
| 56# | 74 | 83 | .000 | .000 | 99 | .000 | 24 | 6 | .318 | .530 |
| 57 | 153 | 91 | .060 | .100 | 97 | .028 | 28 | 22 | .089 | .148 |
| 58 | 211 | 52 | .108 | .181 | 75 | .044 | 42 | 32 | .078 | .129 |
| 59# | 375 | 98 | .078 | .130 | 99 | .040 | 103 | 46 | .099 | .165 |
| 60 | 262 | 100 | .071 | .118 | 122 | .031 | 72 | 31 | .122 | .203 |
| 61 | 271 | 81 | .084 | .140 | 74 | .047 | 78 | 23 | .158 | .263 |
| 62 | 388 | 48 | .122 | .203 | 57 | .058 | 112 | 51 | .093 | .155 |
| 63# | 146 | 99 | .051 | .086 | 97 | .028 | 31 | 22 | .103 | .172 |
| 64# | 1401 | 95 | .089 | .149 | 89 | .048 | 166 | 35 | .135 | .225 |
| 65# | 131 | 45 | .109 | .181 | 48 | .054 | 57 | 26 | .130 | .217 |
| 66# | 191 | 123 | .048 | .081 | 98 | .033 | 86 | 25 | .152 | .253 |
| 67# | 608 | 97 | .084 | .140 | 98 | .044 | 169 | 49 | .108 | .181 |
| 68 | 859 | 28 | .167 | .279 | 97 | .045 | 200 | 35 | .138 | .230 |
| 69# | 307 | 92 | .079 | .131 | 89 | .042 | 81 | 45 | .089 | .149 |
| 70# | 291 | 101 | .072 | .121 | 77 | .046 | 74 | 45 | .084 | .140 |
| 71# | 499 | 97 | .082 | .137 | 97 | .044 | 111 | 33 | .131 | .219 |
| 72# | 500 | 97 | .082 | .137 | 88 | .046 | 194 | 29 | .154 | .257 |
| 73 | 84 | 98 | .000 | .000 | 99 | .000 | 29 | 15 | .162 | .269 |
| 74 | 235 | 87 | .077 | .128 | 98 | .036 | 41 | 20 | .144 | .240 |
| 75 | 281 | 37 | .138 | .230 | 126 | .063 | 53 | 30 | .108 | .180 |
| 76 | 100 | 47 | .096 | .159 | 43 | .054 | 43 | 22 | .134 | .224 |
| 77 | 339* | 95 | .078 | .131 | 98 | .040 | 82 | 16 | .202 | .336 |
| 78# | 171 | 57 | .097 | .162 | 57 | .050 | 55 | 14 | .208 | .346 |
| 79 | 221 | 77 | .083 | .138 | 66 | .049 | 90 | 29 | .138 | .229 |
| 80# | 299 | 86 | .082 | .137 | 90 | .042 | 49 | 18 | .169 | .281 |

Table J1 Continued

| | | SPS | | | JCES | | FPS | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| College | Estimated Student Population (Sophomore Enrollment) | No. of Forms | S.E. for $\sigma = .9$ | S.E. for $\sigma = 1.5$ | No. of Forms | S.E. for $p = 1/3$ $q = 2/3$ | Faculty Population | No. of Forms | S.E. for $\sigma = .9$ | S.E. for $\sigma = 1.5$ |
| 81 | 208 | 95 | .068 | .113 | 91 | .037 | 42 | 33 | .073 | .121 |
| 82 | 207 | 35 | .139 | .231 | 98 | .035 | 57 | 23 | .145 | .242 |
| 83 | 275 | 98 | .073 | .122 | 72 | .048 | 74 | 49 | .075 | .125 |
| 84# | 1200 | 100 | .086 | .144 | 99 | .045 | 407 | 40 | .135 | .225 |
| 85# | 485 | 97 | .082 | .136 | 142 | .033 | 124 | 42 | .113 | .188 |
| 86 | 424 | 88 | .085 | .142 | 87 | .041 | 64 | 47 | .068 | .113 |
| 87 | 149 | 95 | .056 | .093 | 87 | .032 | 44 | 29 | .098 | .163 |
| 88 | 460 | 83 | .089 | .149 | 78 | .049 | 89 | 19 | .183 | .305 |
| 89 | 199 | 99 | .064 | .107 | 95 | .035 | 51 | 30 | .105 | .176 |
| 90 | 252* | 91 | .075 | .126 | 83 | .042 | 36 | 26 | .093 | .155 |
| 91 | 261 | 54 | .109 | .182 | 84 | .042 | 47 | 20 | .153 | .254 |
| 92# | 97 | 97 | .000 | .000 | 90 | .013 | 44 | 13 | .210 | .349 |
| 93 | 640 | 84 | .092 | .153 | 93 | .045 | 85 | 39 | .106 | .177 |
| 94 | 652 | 74 | .099 | .164 | 86 | .047 | 153 | 44 | .115 | .191 |
| 95 | 1518 | 121 | .079 | .131 | 119 | .042 | 222 | 97 | .069 | .114 |
| 96# | 349 | 93 | .080 | .133 | 94 | .042 | 94 | 33 | .126 | .210 |
| 97 | 249 | 87 | .078 | .130 | 72 | .047 | 97 | 37 | .116 | .194 |
| 98 | 147 | 90 | .059 | .099 | 98 | .026 | 49 | 27 | .116 | .193 |
| 99 | 428 | 97 | .080 | .134 | 96 | .042 | 90 | 47 | .091 | .151 |
| 100 | 253 | 98 | .071 | .119 | 99 | .037 | 61 | 41 | .081 | .134 |

* Approximations - No actual enrollment listed in Junior College Directory

# Faculty and student population for 1964 - all others for 1965.

## Table J2

### Reliabilities of JCES Scales and Frequency Distributions of Item Correlations (Scored as -1, 0, +1) on JCES Scales for 100 Public Junior Colleges

| Scale | Reliability | Item Correlations on Scale Scores | | | | Total Scale Items |
|---|---|---|---|---|---|---|
| | | <.40 | .40-.50 | .50-.60 | >.60 | |
| $E_1$ - Conventional Conformity | .94 | 5 | 10 | 20 | 11 | 46 |
| $E_2$ - Internalization | .88 | 4 | 7 | 9 | 6 | 26 |
| $E_3$ - Maturation | .91 | 8 | 7 | 10 | 5 | 30 |
| $E_4$ - Humanism | .86 | 2 | 9 | 7 | 3 | 21 |

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## Table J3

### Reliabilities of SPS Scales and Frequecny Distrubutions of Item Correlations (Scored 1 through 5) on SPS Scales for 1000 Junior College Students

| Scale | Reliability | Item Correlations on Scale Scores | | | | Total Scale Items |
|---|---|---|---|---|---|---|
| | | <.40 | .40-.50 | .50-.60 | >.60 | |
| $S_1$ - Scholarship and Intellectual Environment | .93 | 3 | 24 | 20 | 1 | 48 |
| $S_2$ - Sociability | .91 | 8 | 9 | 7 | 9 | 33 |

## Table J4

### Reliabilities of FPS Scales and Frequency Distributions of Item Correlations (Scored 1 through 5) on FPS Scales for 779 Faculty

| Scale | Reliabilities | Item-Scale Correlations | | | | Total Scale Items |
|---|---|---|---|---|---|---|
| | | <.40 | .40-.50 | .50-.60 | 7.60 | |
| $F_1$ Students | .85 | 2 | 10 | 6 | 2 | 20 |
| $F_2$ Liberal Arts | .92 | 1 | 7 | 18 | 5 | 31 |